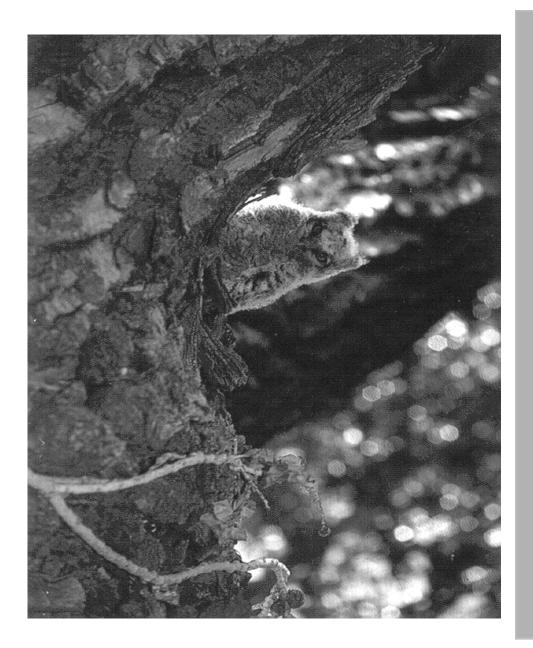
CHAPTER 6

PUBLIC COMMENTS AND RESPONSES



Great horned owls are one of several raptors to successfully nest along Empire Gulch.

Letter 1

1-1

1-2|

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1 - 4

August 18, 2001

Bureau of Land Management Tucson Field Office 12661 E. Broadway Tucson, Az. 85748-7208

Draft Las Cienegas Resource Management Plan and Environmental Impact Statement

I believe the Alternate #2 & #4 Land Designation of Area of Critical Environmental Concern for the entire Reserve is totally un-called-for. On top of this you also include 75,000 acres of State Land. This will open the door for some over zealous administrator to close the entire area to protect some Endangered Species etc.

In the past several years a small group of radical environmentalists, who represent 2% of the population, have successfully closed vast areas of our Country, using the Endangered Species Act, Roadless Areas, Wildlands, Mounments, Parks and Scenic Rivers etc. These actions deny citizens access to Public Lands and "lockup" our Natural Resources. The latter is a serious threat to our Nations security.

The most aggressive Land Designation should not exceed Alternate #3. In your description of recreational Zones, Zone #3 should contain a description of those activities which are allowed. Such as: primitive camping (14 day maximum), OHV (on marked trails), hunting (under State Regulations), rockhounding, hiking, horseback

riding, bicycling, sightseeing, birdwatching and photography.

The Public Lands were set to be multi-use, and they keep getting more restrictive every year.

I feel it is necessary to spell out the uses, as there is always someone who would take them away. Don't leave it to interpretation.

I appreciate the opportunity to comment, and will continue to study the document. I plan to attend one or more of the open houses.

George Volker Bo3 W. Annandale Way Tucson, Az. 85737 Ph 797-2659 Email gv2406@aol.com

RECEIN AUG 2 8 20 TUCSON FIELD O

- 1 1. Your comment has been noted.
- 1 2. Your comment has been noted.
- Text has been added to Chapter 2: Recreation Management Actions Common to Alternatives 2, 3, and 4 section & Appendix 2 describing allowable dispersed recreation activities and restricted activities. Table 2-26, Section 3 was intended to describe the basic recreation opportunities available and compatible to an area such as Las Cienegas NCA. Listing all recreational activities in various combinations not specifically listed in the table would not be practical. However, review of the activities listed in the Recreation Management Information System (RMIS) which has been added to Appendix 2 and restricted activities can help visitors reasonably assess which recreation opportunities and settings are available in each zone.
- 1 4. As population grows, the demand for use of public lands increases. As a result, some level of restrictions may be needed in order to have sustainable resources in the areas where they were put in place. However, there are still millions of acres of public lands available for a variety of multiple use activities including those within the Las Cienegas NCA.
- 1 5. See response 1-3

Letter 2, Page 1

September 14, 2001

SEP 1 7

1922 E. Orion Street Tempe, AZ 85283

TUCSON FIE

Mr. David McIlnay, Acting Manager BLM Tucson Field Office 12661 E. Broadway Road Tucson, AZ 85748

Dear Mr. McIlnay,

I am writing to comment on your draft resource management plan (RMP) and environmental impact statement (EIS) for the Las Cienegas National Conservation Area (NCA) and Sonoita Valley Acquisition Planning District. My comments will be limited to the plan's livestock management proposals.

to the plan's livestock management proposals.

As you may know, over the last several years I have attended several of the periodic biological planning meetings hosted by the Donaldson's. They have certainly exhibited, as lessees of the Empire-Cienega grazing allotment, a concern for this area's unique natural resources, and a willingness to participate in a public planning process. And I understand the value of the collaborative and adaptive features of these meetings. But I still worry about how well this system would work if some other, less

But I still worry about how well this system would work if some other, less cooperative, people were the lessees. That's because the bottom line is that, after they listen to all the people that come to their meetings, they are still the ones that make most of the decisions about how many cattle are on the allotment and when they'll be moved.

What I'm trying to say is that I support your proposal to implement the biological planning process on all of the NCA's allotments. But only if you outline some specific regulatory boundaries within which they are required to operate. Fortunately, you have included some in your proposed action, Alternative 2.

The most important one, I believe, is your proposal to establish a conservative maximum upland forage utilization standard of 30-40%. If livestock numbers were set variably to comply with this utilization standard, as you propose, I think it would be a great improvement. As Professor Holechek explained in his 1999 article, higher forage utilization levels result in rangeland deterioration in desert grasslands like these.

But I still think you need to identify a maximum number of permitted cattle for each allotment. That way, if something goes wrong with the biological planning meetings, there won't be too many cattle out there. I suggest that the maximum number permitted should at least be adjusted downward so that estimated forage utilization would not exceed 35% in a favorable precipitation year.

Identifying the appropriate allowable maximum forage utilization level, however, is also a function of how forage use is measured. The EIS states that, "The available forage is assumed to be 50% of the total vegetation produced multiplied by the 35% utilization rate on land allocated for livestock grazing." Huh? Can you please give a clearer explanation of the method you are using to calculate available forage?

Compliance with the forage use maximum, of course, should not be the only control upon livestock utilization levels. I support your proposals to leave extra groundcover in pronghorn antelope fawning, and grassland sparrow areas. But I suspect that the local quail population could also benefit from more standing ground cover. The EIS states that three species of quail are found on the NCA. Research has shown that a minimum 6 inch stubble height must be maintained to allow quail to prosper (Brown

2 - 1. To clarify, even with the use of the Biological Planning Process in Alternative 2, the BLM Field Manager makes the decisions regarding the grazing use on the public lands in the planning area including the maximum number of livestock that can be run and the flexibility of the rotation of the cattle through the pastures on the ranch. The Biological Planning Team (BPT) will help the Bureau review the monitoring data and provide input into proposed actions. The Bureau will make the decisions after review of existing data and after consultation and coordination with the BPT and other interested agencies and public.

The Bureau is considering having the Tucson Field Manager request that the BPT be established as a separate Rangeland Resource Team (RRT) operating under the auspices of the Arizona Resource Advisory Council (RAC) as provided for in 43 CFR 4100. Text has been added to Alternative 2, Livestock Grazing Management Actions describing this proposal.

2 - 2. The Bureau operates under 4100 CFR Grazing Administration. Upper limits for livestock numbers have now been established for each of the alternatives, along with the established utilization limit. The change establishing an upper limit for livestock numbers for Alternative 2 has been made in Tables 2-4, Table 2-12, and Tables 2-15 through 2-19 and in the livestock management sections of the Land Use Plan proposals for each alternative. This decision is in accordance with Section 4110.2-2 CFR.

Letter 2, Page 1 (continued)

2 - 3. Forage allocation for livestock grazing is a very complicated process. It is dependent on many variables (health of the plants, amount and timing of precipitation, size and condition of the animals, the composition of the plant community, etc.). This difficulty is the primary problem facing "proper management" of the proposed grazing operations. The number of cattle that can be grazed at any particular time varies because the production varies. To try and show this we picked a simplified set of circumstances and compared the vegetation production and the associated forage consumption by cattle at stocking rates in favorable, average, and unfavorable years of vegetation growth. The point was not to evaluate the accuracy of the stocking rate or utilization rate, but to show that only by varying the stocking rate annually can we ever expect to avoid overstocking the range, particularly in the unfavorable years. Even at conservative stocking rates overgrazing is likely to occur during the drought years, and this is when the health of the range is most adversely affected.

For our example we only allowed one-half the current year's vegetation production that is available (accessible) to be considered in the forage allocation for cattle (the rest is left for watershed protection, general wildlife, etc.). The amount of useable production (forage allocated) for livestock is then determined by multiplying half the total production by the utilization limit. The resulting pounds of vegetation production are the forage allocated for livestock in the scenarios presented in the tables. Thus in Table 2-24 in a favorable year only 15% of the production was made available as forage at the 35% use rate (100% - (50%-35%)) and of the 15% allowed, only 11% of the total production or 64% of the amount allocated at the 35% use rate was consumed.

2 - 4. Through the biological planning process, if monitoring indicates an issue with quail habitat quality, a specific objective could be developed in the future. BLM has acquired a recent Arizona Game & Fish Department (AGFD) publication on the effects of human activity and habitat conditions on Mearn's quail populations. This research suggests that grass cover somewhere in the range of 50% to 75% is optimum for Mearn's quail (the most sensitive of the three quail species to changes in grass cover). BLM is currently coordinating with AGFD on the use of a visibility obstruction board to assess quail habitat conditions. If this technique proves useful it will be incorporated into the monitoring program, in addition to monitoring that is proposed for wildlife species and habitat.

Citation: Bristow, K. D. and R. A. Ockenfels. 2000. Effects of human activity and habitat conditions on Mearn's quail populations. Ariz. Game & Fish Depart. Research Tech. Bulletin No. 4, Phoenix. 27 pp.

Letter 2, Page 2

1982). Will consideration of quail habitat quality be incorporated into the identification of appropriate upland forage use levels? I also support your proposals to further limit livestock access to the NCA's important riparian areas. The EIS explains that you are proposing to exclude livestock from more stretches of Cienega Creek, and this is good. But I couldn't find where it shows how much of the perennial portion of the stream will still be grazed by cattle. Can you please summarize the amount of livestock grazing that would still be allowed in the stream with the implementation of your proposed action? Also, why are you proposing to allow the cattle to stay in the stream crossing lanes for up to 21 continuous days? I find it difficult to believe that it's necessary to allow 2 - 6 them in there that long just so they can cross the stream to another pasture. The EIS explains that there are currently six of these crossing lanes, and that two more are proposed. Why is it necessary to create two more of them? Furthermore, why should these crossing lanes be exempt from the requirement to exclude cattle from southwestern willow flycatcher habitat during the bird's breeding 2-7 season? I also don't understand why you are proposing to continue to allow the Cinco Ponds pasture of the Empire-Cienega allotment to be grazed during the summer. For that matter, none of the NCA's riparian areas should be grazed during the warm season. The EIS shows that a riparian habitat assessment conducted in 2000 found that 33% of Cienega Creek and 61% of Empire Gulch still had not achieved proper functioning condition. Can you please specifically identify all the riparian areas that would be grazed during the summer under your proposed action, and whether or not they are currently in proper functioning condition? Finally, there's your proposal to establish a new livestock grazing allotment on the currently ungrazed BLM lands in the Empire Mountains. I understand that the NCA's enabling legislation states that you "shall permit" livestock grazing. But it also says that it should only take place in "appropriate areas" and be subjected to all applicable laws and regulations. Trying to graze livestock in mountains doesn't make any sense to me and I believe the area should be classified as unsuitable for grazing. Moreover, who's going to pay for the fences and livestock watering devices that would be needed to adequately manage grazing on the new allotment? I don't think it's right for the taxpayers to have to pay to start up a private ranching operation. At the very least, the new permittee should be required to build and pay for any necessary range "improvements" before cattle would be permitted on the allotment. (And they shouldn't be allowed to use Arizona Water Protection Fund, EPA Section 319 grants, or other public monies to do it.) Thank you for this opportunity to participate, and please keep me updated on the status of this project. Sincerely, Ph 602-417-4486 (day) E-mail: jburgess@grazingactivist.org

The situation with the livestock watering areas and crossing lanes has been confusing and some changes have been made since the Draft Plan. This information has been clarified and is summarized in Table 2-25 and shown on a new map, Map 2-19A. Alternative 2 proposes to eliminate the Bahti, Rick's, and Jesse lanes and replace them with a lane "hardened" with gravel where the old agricultural fields road crosses Cienega Creek. This results in two fewer livestock lanes than under current management. Thus Alternative 2 (preferred alternative) proposes six lanes (Headwaters, Gardner, Old Road, Fresno, and Dominguez on Cienega Creek and one on upper Empire Gulch). Each lane is about 300 yards long, and the total acreage of all six lanes represents about 2.7% of the total riparian area of Cienega Creek. The lanes could be used for up to 21 days a year, although past use has been less often and usually all lanes are not used each year depending on the selected rotation.

The A & B watering area (0.5 mile) on Cienega Creek would have to remain until an alternative upland water could be created to provide water on the west side of the creek. The other watering area at the Cienega Creek Narrows (1.5 miles) would remain until other solutions can be developed as reliable sources of upland water are not present. Use of A & B riparian watering area occurs predominately during the non-growing season (between December 1-May 1, depending on the cattle rotation for that year). Use of the A & B

Letter 1, Page 2 (continued)

2 - 5. (continued)

pastures is rotated to provide periodic rest of each area from grazing. Use of the Narrows riparian watering area occurs in the winter-spring (between December 1-April 1, depending on the cattle rotation for that year). The riparian watering areas are about 8.6% of the total riparian area of Cienega Creek.

- 2 6. The 21 days is primarily needed in the spring when the cows have their young calves with them. The cattle are moved across the creek in groups as they are rounded up. It is critical, if the calves are not weaned from their mothers, to make sure they are "paired up" prior to pushing them across the creek. In the fall and winter this is not a problem and they can cross much more quickly.
- 2 7. Livestock management actions will be consulted on during the formal Section 7 consultation with the U.S. Fish and Wildlife Service for this land use plan. Livestock management is not exempt from Endangered Species Act consultation requirements.
- 2 8. See response 2-5 above. The six crossing lanes could be grazed during the summer months depending on the livestock rotation. Currently the stream segments supporting the Headwaters, Gardner, Fresno and Dominguez lanes and the new Empire Gulch lane are in proper functioning condition. The old road lane is in the Agricultural fields segment which is functional at risk due to on-going stream restoration efforts. The recreation crossing lane (for the AZ trail) is also in this segment. The A&B pastures just downstream of the Ag fields are also functional at risk. The three segments of Cienega Creek partially included in the Narrows watering area are a combination of PFC and Functional at Risk. The Functional at Risk ratings for these segments is due to sediment loads from side drainages in the uplands and is currently being evaluated.
- 2 9. This alternative was analyzed because grazing was occurring on the private land in the Empire Mountains prior to its acquisition by the BLM. When BLM acquired lands in the area there was no existing grazing lease to honor. Cattle grazing continued, but was determined to be in trespass and an order was issued to remove all livestock from the federal lands. The livestock operators submitted applications for the "legal" grazing of these public lands and the authorized official made a decision that BLM could not authorize grazing until the issue was analyzed in the Land Use Plan and EIS. As a result, establishing a grazing allotment in the Empire Mountains was made an alternative. At that time there was no known opposition to the proposal and the operators had leases from many of the owners of adjacent, private land. Therefore, grazing was included as part of the Preferred Alternative. Because of the intermixed ownership, which complicates management of livestock grazing on public lands in the Empire Mountains, there is a list of conditions which must be met before grazing use would be activated. These conditions include stipulations to protect rangeland health. If the conditions are not met within five years of the Record of Decision (ROD) on the plan, then BLM will reassess the decision and may reallocate the forage to watershed. Text has been added to Chapter 2: Livestock grazing management actions for Alternatives 2 and 3 summarizing the stipulations.

Letter 1, Page 2 (continued)

2 -10. Adequate range improvements, such as fences and waters, must be built in the Empire Mountains as one of the conditions prior to activating grazing use. In order to implement a grazing program that would have enough pastures to provide adequate rest periods from grazing, many improvements would have to be constructed on private lands not owned by the grazing operator. Rights-of-way and agreements would be required, grazing and trailing through subdivisions would be necessary. Activation of grazing use, and then profitably utilizing a grazing allotment would potentially be very expensive. The rancher would be responsible for all of the labor and material on private and state lands. The Bureau might consider buying some material for the fences on public lands, but the water developments and labor would all be the responsibility of the rancher.

Letter 3

| | BOUGLAS J. HAMILTON 8040 N. TOTAVI TR. TUCSON, AZ 85704-2100 (520) 297-0058 hamiltdj@worldnet.att.net | RECEIVE SEP 1 7 200 TUCSON FIELD O |
|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| | Mr. David McIlnay, Acting Field Manager BLM Tucson Field Office 12661 E. Broadway Tucson AZ 85748 | September 13, 2001 |
| | Dear Mr. McIlnay; | |
| | This letter is in reference to the Draft Las Cienegas Resource Management Plan and | Impact Statement. |
| 3 - 1 | First, I wish to commend you and your staff on the good job that has been done on to I have several comments to make regarding Alternatives: | his report. |
| | I am particularly interested in the region around the Empire Ranch, North Canyon and Oa been doing some historical research in that area. | ak Tree Canyon. I have |
| | There was a wagon road from Ft. Crittenden to the location of what was later to become the along Oak Tree Canyon, north to Davidson Canyon and thence to La Cienega station. This visas. I am attaching a copy of a section of that map. | |
| | The road was used probably until at least 1904. A plotted this on current topographic maps, and have done some field work with a GPS unit, at photos. Parts of the road can be seen on the aerial photos, and I was able to find some of it or | |
| 3-2 | 4. Because of the above, I feel that more work should be done by some agency to evaluate his area before allowing an increase of visitor traffic. I am not in favor of restricting the area any presently done, but I am opposed to the introduction of new trails such as the proposed SAM Arizona Trail of Alternative 2. I am not opposed to these permanently but only until adequat find and protect any historical features and artifacts. The Historic Trails Subcommittee of the on Trails could be approached on this matter. I think some effort should be made to find the road in the entire Las Cienegas Resource Area. | More than is BA trails and the e work can be done to e Arizona Committee |
| | In addition to the copy of the map, I am attaching a photo of one of the road of maps on which I have plotted the approximate location of the 1904 road, and the GPS determ it. Also attached is an aerial photo it clearly visible. | nination of a portion of |
| | Yours truly, Augler Aan | ulton |

- 3 1. Thank you for your comment.
- The wagon road described in your letter is not identified in this EIS for future recreational development or use by the Arizona Trail or North Canyon non-motorized trail. Normal planning procedures call for Class III cultural resource surveys to be conducted on all trails and roads proposed for use in the LCNCA. This inventory would include a thorough search of historical files, records, documents and maps which might show or indicate the locations of historical trails and roads leading through the NCA. Then, an archaeologist would walk the entire route and document any cultural resources found along the way. Impacts could be avoided by routing the trail or road around archaeological sites and features, or mitigated by data collection. In compliance with the National Historic Preservation Act the BLM would consult with the Arizona State Historic Preservation Office (SHPO) on plans, designs and construction which might impact such trails or roads. (Note: specific descriptions of sensitive cultural sites and detailed maps submitted with this comment letter have been redacted in order to protect these resources by not disclosing their location.

Letter 4, Page 1

RECI

September 24, 2001

SEP 2

1922 E. Orion Street Tempe, AZ 85283 TUCSON F

Mr. David McIlnay, Acting Manager BLM Tucson Field Office 12661 E. Broadway Road Tucson, AZ 85748

Dear Mr. McIlnay,

Earlier this month I submitted written comments on your draft resource management plan (RMP) and environmental impact statement (EIS) for the Las Cienegas National Conservation Area (NCA) and Sonoita Valley Acquisition Planning District. Those comments were limited to the plan's livestock management proposals. These supplemental comments are limited to the ecological restoration of Cienega Creek in the area of the old agricultural fields, near the old Cienega Ranch.

As you know, in the 1970's these fields were being farmed and a diversion canal was dug upstream to protect them from large flood events. It diverted flood waters around the eastern side of the fields and dumped the water downstream into lower Mattie Canyon. Three dams were also built adjacent to these fields in Cienega Creek itself in order to create small irrigation reservoirs. That poorly conceived agricultural enterprise ultimately failed and your agency eventually acquired ownership of the property.

But, unfortunately, you found that the diversion canal and the dams had drastically altered the hydrology of this stretch of Cienega Creek. The diversion canal was capturing a portion of Cienega Creek's regular flow, so much that it supported riparian trees along its banks, and it was causing crosion in Mattie Canyon. Furthermore, the dams in Cienega Creek next to the fields had changed the nature of that stretch of the stream turning it into a series of relatively streams to come the dams.

stream, turning it into a series of relatively stagnant ponds.

Subsequently, a few years ago your office obtained an Arizona Water Protection Fund grant (#96-0020) of \$210,700 from the state for the purpose of reestablishing the natural flow of Cienega Creek in this area. This money was used to block the mouth of the diversion canal and remove the three dams that had been constructed in Cienega Creek. The idea was to try and restore normal hydrological function.

Last weekend I visited this area to see what changes had occurred since the restoration project had been completed. I found that there was no longer any surface flow in the diversion canal. But almost all of the riparian trees along its course were still thriving. The abandoned agricultural fields, which used to have a lot of bare ground, were almost completely covered with vegetation, including some grass and mesquite trees. The adjoining stretch of Cienega Creek, where the dams were, had thicker riparian vegetation, but the streambed was dry. I don't claim to know what all of this means but it was obvious that the restoration effort has made a difference.

The draft RMP and EIS describe the history of this stretch of Cienega Creek and mention the restoration project. But it seems to me that the EIS should pay more attention to the ecological restoration of this area.

I suspect that the historical channel of Cienega Creek wasn't located where it is now, in a relatively straight line up against a bank along the western edge of the abandoned agricultural fields. I think it probably meandered somewhat across the middle of the old fields. The recently accelerated re-vegetation of the old fields suggests that there's now more underground moisture there. Also, the continued health of the riparian

We plan to continue ecological restoration efforts in the old agricultural fields. One proposal calls for routing watershed drainages across the diversion canals. This would increase the soil moisture and change the expression of the plant community. The wetland at the southern end of this area is also in need of restoration. It was diked with levees, before BLM acquisition, to raise water levels for agricultural pumping. A proposal for this continued restoration has been added as a watershed management action common to Alternatives 2, 3, and 4.

Letter 4, Page 2

4-2

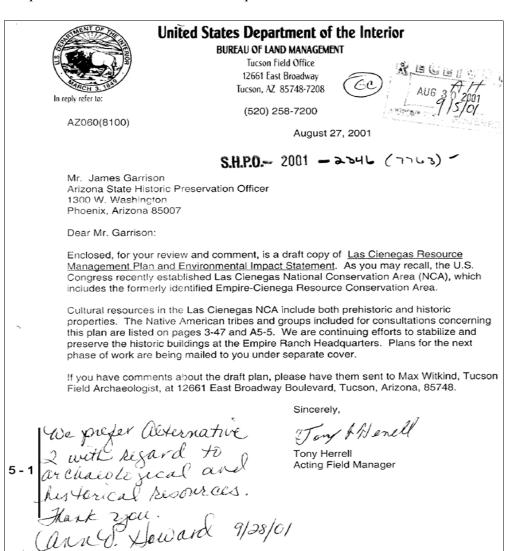
trees along the old canal suggests there's still significant underground moisture there too. When you add it all up, it implies that the entire area, from the diversion canal and across the old fields to the existing creek channel, was once a moist, swampy area bisected by a sinuous stream channel. Just upstream, or south, of the old fields there's a swampy area that's separated from the fields by a low dike. Perhaps it would be a good idea to totally remove this dike so that this section of Cienega Creek can be freed to find its own natural equilibrium?

Thank you for this opportunity to participate, and please keep me updated on the status of this project. Sincerely,

Ph 602-417-4486 (day)

E-mail: jburgess@grazingactivist.org

4 - 2. See response 4-1.



5 - 1. Thank you for your comment.

Letter 6, page 1

ALUE. October 2, 2001 OCT 0 RUCSON FIE David McIlnay, Acting Field Manager Bureau of Land Management Tucson Field Office 12661 E. Broadway Tucson, AZ 85748 Re: DRAFT Las Cienegas Resource Management Plan and Environmental Impact Statement Dear Mr. McIlnay: I must compliment the BLM and the SVPP for all the effort put into the DRAFT Las Cienegas Resource Management Plan and Environmental Impact Statement. . Your vision and goals for future conditions is good. While I believe Alternative 4 would best 6-2 protect and improve flora, fauna and T & E species; I realize Alternative 2 is closer to what politics, budget and compromise will allow. Also, the BLM came into this process determined that grazing would remain part of the planning for this area. Alternative 4 is definitely the best for Willow Flycatcher, Lesser Long Nosed Bat and other T & E species. I can reluctantly support Alternative 2 (your Preferred Alternative) with some modifications as follows: · All cattle and vehicle riparian crossings should be hardened to minimize 6-3 sedimentation, which is a negative impact to the T & E fish species. I am opposed to a group camping site at the Ag Fields. I'm sure the fact the Ag Fields are already heavily impacted influenced this decision. However, they are situated next to an important riparian stretch, which would have negative impacts to wildlife if lots of campers are allowed next to it. Possibly an individual campsite at each end would not be a major impact. The Ag Fields should be 6 - 4 considered for restoration to marshy conditions like they probably were before they were drained. There also is an important pre-Columbian cultural site at the NE corner of the Ag Fields. Having a group camping site near it could result in increased vandalism. I am also opposed to the new Empire allotment. From a taxpayer standpoint, it 6-5 I would cost far more to manage than the \$300/year the BLM would collect. It probably is being requested as a property tax dodge by the private landowners. It would be a double hit to the general public if new costs to the taxpayer would be used to avoid taxes by a few.

- 6 1. Thank you for your comment.
- 6 2. Thank you for your comment.
- 6 3. See response 2-5. The Bureau is currently proposing to harden two or three crossings with gravel and rock. One would be located on Empire Gulch, downstream and below the livestock exclosure; one at the Old Cienega Creek Road crossing on EC-901, the route from the Empire Ranch headquarters to the Cienega Ranch (for livestock, equestrian, and hiking use); and a third on Cienega Creek west of the agricultural fields (for resource concerns with the Cienega Creek restoration project). This is mitigation for soil disturbance and subsequent erosion. In some cases this will also prevent the mortality of livestock which can occur due to entrapment in deep mud.
- 6 4. See response 4-1. Ecological restoration of the old Agricultural Fields has been added to the Proposed Action Alternative 2 Watershed Management Actions section. The maximum group size capacity for the old Agricultural Fields has also been reconsidered and reduced to 500 for a single event. In order to use the group site, participants would need to apply for a special recreation permit which would be evaluated through NEPA and if approved would include stipulations on the activity to protect ecological restoration efforts in the area. The group site is specified for low impact activity use. Use would be directed to the north east portion of the field. There is a proposal to provide water sources

Letter 6, page 1 (continued)

6 - 4. (Continued)

on the NCA as an alternative to visitors obtaining water from Cienega Creek. This would help prevent the trampling of stream vegetation and banks. The BLM will be monitoring impacts of uses of the old Agricultural fields area and implementing mitigation measures including, if necessary, the option to close the area to support restoration efforts.

Cultural resources in the conservation area are protected by the Archaeological Resources Protection Act (ARPA). People who choose to break this law, and who are caught disturbing, vandalizing, artifact collecting or looting cultural sites in the conservation area, may be fined up to \$100,000 and sentenced to as long as five years in prison. Information explaining the laws will be provided to visitors in brochures and posted on kiosks. Cultural properties near high-use areas, such as camping sites, will be systematically monitored.

Letter 6, Page 2

6-6

Consider retiring the Empire-Cienega allotment if the Donaldson's ever decide to
quit leasing it. The likelihood of getting another lessee as conscientious and
concerned about maintaining and improving the resource for flora and fauna is
slim to none.

Thanks for your consideration of the above comments.

Sincerely, Jun Notestines

Jim Notestine

P. O. Box 461 Sonoita, AZ 85637

irisjim@dakotacom.net

- 6 5. See responses 2-9 and 2-10.
- 6 6. This could be considered as an alternative if the Donaldsons were to terminate the grazing lease.
 Any new lessee would be required to meet the same level of coordination, consultation, and resource protection in conducting their operation.

Letter 7



United States
Department of
Agriculture

Natural Resources Conservation Service

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Dear David, 10-24-01

My name is Dan Robinett and I am a Rangeland Management Specialist for the Natural Resources Conservation Service. I have been involved in the planning effort on the Empire Ranch both professionally and privately for the last ten or so years. I would like to thank you for the opportunity to review and comment on the draft plan for the Las Cienegas NCA. I would also like to say that I think this plan is an excellent one and I fully support the preferred alternative proposed by BLM. I have only a few comments that I would like to enter for the official record.

On page 3-17 the discussion relates the information that BLM has done several ecological site inventories in the planning area. I would like to amend this part to read; "The ecological site inventory for the Empire-Cienega ranches was done by BLM, NRCS and the Permittee in the fall of 1995". Grant Drennen, Mac Donaldson and myself did the inventory. Also I would change the next sentences to read; "The ecological site inventory on the Empirita Ranch was done by the NRCS and the Permittee in 1994. And "The Appleton – Whittell (Research Ranch) property has had a new ecological site inventory and soil survey completed by NRCS and the Research Ranch in the spring of 2001". Don Breckenfeld and I did that survey with the assistance of Linda Kennedy of the Research Ranch this past fall, winter and spring. We provided the information to your office in April.

On the list of private citizens involved in the Sonoita Valley Planning Process starting on page A5-8 I would like to have my name included. I have spent many hours of my own time attending meetings and doing monitoring in this area on weekends and feel like I have been involved as both an Agency representative and as a private citizen.

Finally I would like to add that I think that a great deal of credit for the success of this planning effort should go to Karen Simms. In my opinion she has done an outstanding job for BLM and possessed the unique ability to put aside her own opinions and let this diverse public group drive the process. I am impressed! I also think that Grant Drennen deserves special credit also for his tremendous efforts both weekdays and weekends in helping to orchestrate a kind of grazing program that has broad public acceptance. Last I would like to thank the Donaldson family for their superb stewardship and support for the biological planning process in place and their excellence in management of grazing.

Sincerely, Dan Robinett NRCS Tucson RST Office

- 7 1. Thank you for your comment.
- 7 2. Your comment has been noted and the text has been modified in Chapter 3 Upland Vegetation section covering "Ecological Site Inventories of the Upland Vegetation".
- 7 3. Your comment has been noted and the text has been modified to include your name under Appendix 5; Private Citizen.
- 7 4. Thank you for your comment.

Letter 8

The Vera Earl Ranch P.O. Box 227 Sonoita, AZ 85637 NOV 1 3 2001

TUCSON FIELD OFFICE

November 7, 2001

Bureau of Land Management Tucson Field Office 12661 East Broadway Tucson, AZ 85748-7208

Subject: Las Cienegas Plan Comment

Dear Sir or Madam:

As you know, The Vera Earl Ranch has an allotment within the Las Cienegas boundary. Our allotment is small in comparison to the others, however, it is very important to our cattle operation as well as the proper conservation of the resources throughout the ranch. We have held the allotment for several years and managed the grazing according to the available resources. To my knowledge, we have never abused the ground and resources.

Under the preferred Alternative, Alternative 2, you propose to make 200 acres or fourteen percent of the allotment "non-grazing" land. We understand the reason behind having some land denoted "non-grazing" land and believe there is a need to allocate some land for resource evaluation. This land should exclude grazing. However, 200 acres out of our allotment would severely hamper our use of the allotment. We have the 1440 acres broken into three pastures of near equal size. If 200 acres are taken out of grazing use, it would effectively close one of our pastures.

8 - 1

The ranch believes that some of the allotment should be "non-grazing" and used for resource evaluation and vegetation study areas. However, we believe the evaluation and study can be done in an area much smaller than the proposed 200 acres. We would be much more amenable to sectioning off smaller sections in each of the pastures to conduct the study.

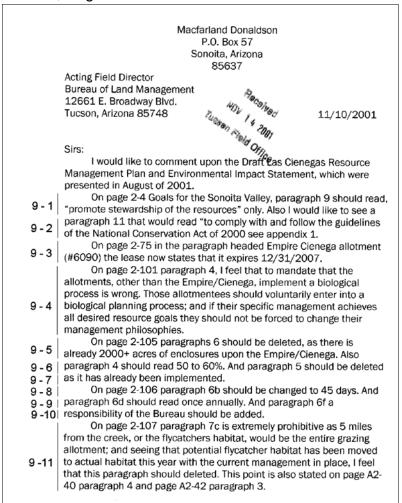
Respectfully.

Ian Tomlinson Ranch Manager

cc: Cinnie Tomlinson, Bob Sharp

We understand your concern about the apparently large percentage of land proposed for grazing exclosures on the small parcel that you lease from the BLM. The idea in the Preferred Alternative was to stress the concept that under this alternative there would be a much more intensive monitoring of the resource being grazed. Areas that are being grazed would have additional adjacent lands set aside without grazing so comparisons could be made to determine the effects of livestock management. Currently the Vera Earl is not managed under the Biological Planning concept as defined in the Land Use Plan. Should you decide to implement that intensive management concept, the Bureau would work with you to determine appropriate lands to rest from grazing to adequately evaluate management. The 200 proposed acres in the plan are flexible, and are shown to demonstrate the commitment to the intensive management and monitoring involved. Text has been added to the proposed action (Alternative 2 Livestock Management) to clarify that the total acres excluded from grazing for study purposes are flexible and that size location and configuration of exclosures will be determined based on monitoring study design.

Letter 9, Page 1



- 9 1. Your comment has been noted. The goals and objectives of this plan were the consensus of the collaborative planning process and it is not suitable to modify them at this time.
- 9 2. Adherence to the guidance of the Las Cienegas National Conservation Act is an overarching requirement for this plan and BLM's management of the area. The goals and objectives are designed to fit under this guidance. Text has been inserted in Chapter 2 just before the goals and objectives describing the Las Cienegas Act and its guidance for the planning effort. Also see response 9-1.
- 9 3. Your comment has been noted and the text has been modified to show the correct date.
- The other grazing leases would not be mandated to accept the concept of the Biological Planning Process.. However, if the lessees do not choose to embrace the process, the allotments would probably be managed under a conservative grazing management strategy similar to Alternative 3. The stocking rates would be set lower (more conservatively) and pasture rotations would be more established as necessary to achieve the resource objectives. An Allotment Management Plan (AMP) would be required by the Bureau, developed with full public and agency input with Terms and Conditions mandated in the Grazing Lease. As stated in the Land Use Plan under Alternative 2, an Ecological Site Inventory would be required to evaluate the Health of the Resource,

Letter 9, Page 1 (continued)

9 - 4. (continued)

and if the current management being practiced by the lessee is adequate, it could be documented by development of a written AMP. The AMP would be reviewed by the appropriate agencies and the public, including the Biological Planning Team (or Rangeland Resource Team). The AMP would need to be approved by the BLM Field Manager.

9 - 5. See response 8-1 and 9-4.

The exact number of acres included in study exclosures is not as important as having adequate acreage that is excluded from grazing placed in study exclosures adjacent to the grazed lands. The parameters of the study exclosures (size, location, and configuration) need to be planned to ensure that meaningful comparisons and evaluations can be made on the impacts of livestock grazing on the public lands. As you are aware, the plan and the monitoring must be flexible to be able to continually adapt to changing needs and new issues.

9 - 6. The utilization limit of 30% to 40% (light to moderate) for livestock in Alternative 2 is a key conservation feature of the grazing plans for Las Cienegas National Conservation Area. An upper utilization limit of 40% ensures that important watershed, fisheries, and wildlife values will be conserved and maintained as per the enabling legislation. It is highly unlikely that the desired plant community objective, desired ground cover objective; the upland wildlife habitat sub-objectives; and riparian vegetation objectives could be achieved with an upper utilization limit of 60%. It is likely that grazing effects to wildlife species and habitats would be substantially different with a 60% utilization limit and wildlife objectives might not be met. For example, with a 60% upper utilization limit, livestock would probably reduce native grass canopy cover and reduce cover below that which is required for successful fawning by pronghorn and white-tailed deer. It is likely that residual cover for over-wintering Baird's sparrow and nesting Grasshopper sparrows would not be sufficient at a 60% utilization level on most public lands within the conservation area.

Utilization is, however, only one tool to be used to help prevent damage to the forage plants. It is intended to be used with the other monitoring practices through the Biological Planning Process to help us evaluate where management can be improved by better movement of livestock. Monitoring may show that some areas are over-used, while some lands may be receiving very little use. We hope to use monitoring results to identify opportunities to improve management, and not as the sole measure for determining stocking rates, as has been common in some plans..

9-7. We recognize that additional exclosures have recently been constructed, through implementation of your watershed protection grant, and that this acreage may not be included in the figure presented in the plan because this document was written prior to completion of exclosure fencing. It is important to note that existing exclosures may not be the correct size, configuration or location for study exclosures and may need to be modified to function as study exclosures. Also see response 9-5 above.

Letter 9, Page 1 (continued)

- 9 8. The text is correct as written. Twenty-one days was previously identified as the maximum length of time that livestock would need to use the crossing lanes each year (although actual use may be much less and may not occur every year). In discussions with you since submission of your written comments, it was agreed that should additional time be needed to use the lanes, the Bureau would work with you and the Fish and Wildlife Service through the Section 7 Consultation Process to address the appropriate time limits and required mitigation. We also agreed that the use of lanes should be addressed at the Biological Planning meetings prior to their use to discuss impacts and concerns.
- 9 9. We concur that annual maintenance of these fences will be sufficient if it is just prior to use of lands adjacent to the exclosures. The text has been modified to make this change.
- 9-10. Yes, the Bureau should be responsible for any necessary pumping of repressos not related to the livestock operation. Text has been added to clarify this action.
- 9-11. This is a requirement in the U. S. Fish and Wildlife Service's current biological opinion on the interim grazing plan and so was incorporated into the proposed action for the RMP. Development of alternative upland waters to replace riparian watering areas and fencing to exclude cattle from the creek are considered crucial to protecting riparian habitat and are provided for in the current biological opinion.

Letter 9, Page 2

| | In the Appendices Chapter 6 (ACEC's) I have some concerns with |
|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9 -12 | the No. 6 Objectives; I would like to see livestock grazing removed from the sentence, as there are more than adequate controls already in place In the No. 6 Management Prescriptions, I hope that this does not include fencing as that is our best tool for managing livestock in the riparian |
| 9 -13 | zone (100 year flood plain). Philosophically I would like to state that I support ACEC alternative #3, and do not support alternatives # 2&4. Following is my comments on the various tables: |
| | Table 2-25 on page 2-106 the crossing lane EC 900 will be at the old road crossing south of that site as per J. Simms' prescription. Sam's |
| 9 -14 | crossing is no longer to be considered. Currently the section 7 |
| | consultation with the U.S. Fish and Wildlife Service allows for winter use from Dominquez to the Narrows and that should not change. |
| 9 -15 | Table 1 on page A2-50 should read as the amended Table 2-25. |
| 9 -16 | Table 2 should no longer read proposed fencing as all but the "Narrows Riparian Fence" has been completed. |
| 9 -17 | I have attached 2 maps that have been corrected (Maps 2-13 & 2-22). |
| 9 -18 | In Closing I strongly support the overall Alternative 2 that is outlined on page 2-105 as I was instrumental in its' formation and my livelihood is directly impacted by the grazing management of the Empire/Cienega Allotment. I thank you for your considerations on the above comments and await your response. |
| | Mudde |
| | Mac Donaldson |
| | |

- 9 -12. The objectives and management prescriptions for the proposed ACECs cover both existing management and future proposals. So the livestock management changes you have made including the fencing of riparian areas support the ACEC proposals and are consistent with the ACEC objectives and proposed actions.
- 9 -13. Your comment has been noted.
- 9-14. Table 2-25 has been corrected.
- 9-15. Table A2-50 is included as part of the summary of the Interim Grazing Plan in the appendix as a reference on current management. Therefore it has not been changed.
- 9 -16. See response 9-15.
- 9-17. Corrections have been made to Maps 2-13 and 2-22.
- 9-18. Thank You for your comment.

Letter 10, Page 1

| NOV 1 6 2001 TUGSON PIELD OFFICE 5152 Avalon Phoenix, Arizona 85018 November 12, 2001 Mr. David McIlnay Acting Field Manager Tucson, Field Office Bureau of Land Management 12661 East Broadway Tucson, Arizona 85748 Dear Mr. McIlnay: Thank you for the opportunity to comment on the draft Las Cienegas Resource Management Plan and Environmental Impact Statement. As a citizen participant in much of the planning, I will be succinct in my comments. 10-1 1 There needs to be clarity in the stipulation that all planning was focused on creating outcomes that first and foremost promote the health of the watershed and its ecosystems. 10-2 1 To that end, all uses need to be managed to not inhibit proper ecofunctioning. In managing uses, carrying capacities need to be fixed individually and in the aggregate. 10-3 1 Monitoring of use and enforcement of limitations needs to be a priority. In its absence the plan cannot succeed. 10-4 1 The planning area must extend beyond BLM holdings. This plan can only succeed if it is extended to all public land within the planning area or watershed. 10-5 1 Fire should be a management tool. Natural fire should not be contained. 10-6 10-7 10-7 10-7 Expanding grazing in the Empirita and Empire Mountains should be precluded. No areas that are not already currently actively grazed should be grazed. There is no evidence this enhances the health of the landscape. | | |
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| 10-8 Cattle should only have access to Cienega Creek at designated areas for purpose of crossing. | 10-7 | are not already currently actively grazed should be grazed. There is no evidence this enhances |
| | 10-8 | Cattle should only have access to Cienega Creek at designated areas for purpose of crossing. |
| | | |

- 10-1. You are right that the SVPP planning process was focused on, first and foremost, promoting the health of the watershed and its ecosystems as the foundation on which all the uses are dependent. The goals and objectives are the basis by which this health is described and measured, while the monitoring is, and will be, designed and evaluated to ensure that proposed actions achieve these objectives.
- 10- 2. Carrying capacity cannot be fixed in most cases, as the conditions that affect carrying capacity are not well understood, and processes by which it is affected often fluctuate annually and seasonally. This is why objectives that set a definition of ecosystem integrity were formulated. Carrying capacity will have to follow, as these thresholds are approached by various uses. This is what is commonly called "adaptive management,"
- 10-3. An ecosystem monitoring program is being developed and will be published as a supporting document to the RMP/EIS.
- 10- 4. We agree that the health of public lands depends on the conditions of the entire basin and in some cases beyond these boundaries. The planning area's public lands are not sufficient to protect, conserve and enhance all the resources under BLM's jurisdiction. Outreach and cooperation will be ongoing in the basin in the pursuit of compatible uses and management of adjacent lands that cannot be acquired or protected through easements.

Letter 10, Page 1 (continued)

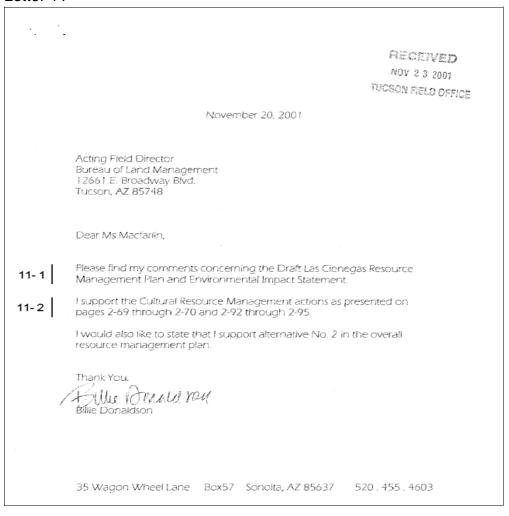
- 10-5. The use of prescribed fire has been identified under vegetation treatments as a watershed management action common to Alternatives 2, 3, and 4. The text has been modified in this section to make this concept more clear. It is really not feasible, with the current land ownership patterns and under existing policies, to manage naturally ignited fires as prescribed fires. BLM's current fire policy is that a fire must be put out unless it occurs within a burn unit and is in prescription. Natural fire is widely recognized as an important element in desert grassland systems. Many investigators suggest that suppression of wildfire and intensive grazing are the two major factors responsible for the decrease in native grass cover and the increase in mesquite and shrub cover. However due to the increasing level of human occupation and recreation in the Sonoita Valley it will not be feasible to allow all natural fires to burn in an un-contained fashion. In addition BLM will be required, under all alternatives, to design vegetation treatments limiting agave mortality to 20%. This limitation will be imposed to conserve the nectar resource for lesser long-nosed bats (for example see item 2d on page 2-67, and item 4 on page 2-88, of draft plan). The plan allows for prescribed fire to meet certain objectives. Refer to Appendix 2, page A2-52, for a description of how these prescribed fires will be planned and conducted.
- 10-6. Monitoring of recreation impacts will be integrated into the Ecological Monitoring Program. Additional details have been added to the monitoring section of Chapter 2. (See response 10-3 also).
- 10-7. See responses 2-9 and 2-10.
- 10-8. Under the Preferred Alternative the objective is to remove cattle from all of the perennial portions of Cienega Creek to the greatest extent possible. The only areas remaining would be those where livestock movement patterns require that they cross the creek, and in those areas where BLM and the operator have not yet figured out how to create an alternative water to the creek, as is the situation at the north end of the Empire-Cienega south of the narrows where limestone geology has so far prevented the development of an alternate water source. (See response 2-5).

Letter 10, Page 2

November 12, 2001 Page Two . It is critical that both the dollars and human resources necessary to implement and manage the plan be committed at the time of adoption. In the absence of resources that plan is a hollow shell. • I object to the language on Page 2-4, Paragraphs 8 and 9. It implies that use is obligatory and 10-10 responsive to human demand, not ecological health. That is contrary to what underlined this planning effort. Use was a privilege to be managed in deference to ecological functioning. This assures the potential for future use with retained value. 10-11 • The concept of the Biological Planning Team should be extended to all uses not just grazing. Thank you for your consideration. Sincerely, (602) 914-4325 jwilliamson@thephxzoo.com

- 10- 9. Your comment has been noted. During recent meetings of the Sonoita Valley Planning Partnership, the formation of some type of Las Cienegas support organization which might function to generate additional revenues, such as grants, for the area has been discussed and is being pursued.
- 10-10. Your comment has been noted. See response 9-1.
- 10-11. It is the intent to expand the Biological Planning
 Team to other resource uses. The Bureau may
 request that the Arizona Rangeland Advisory
 Council create a separate Rangeland Resources
 Team under the Grazing regulations. This group
 could be expanded to address factors, other than
 grazing, that are having an effect on Rangeland
 Health.

Letter 11



- 11-1. Thank You for your comment.
- 11-2. Thank You for your comment.

Letter 12, Page 1



SKY ISLAND ALLIANCE

NOV 2 3 2001

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11/21/01

David McIInay Acting Field Manager Tucson Field Office 12661 E. Broadway Tucson, AZ 85748

Dear Mr. McIInay,

Please accept the following comments for inclusion into the decision making process regarding the final RMP/EIS for the Las Cienegas National Conservation Area.

The Sky Island Alliance is a 501 (c3) member-based organization dedicated to the preservation and restoration of native flora and fauna within the Sky Island region. We represent over 600 members within southeast Arizona, southwest New Mexico, and around the country.

12- 1

Considering the special biological resources contained within LCNCA and the emphasis on ecosystem planning, we feel that Alternative 4 will best meet the biological and social needs of the area. The transportation system in particular is best addressed in Alternative 4.

Roads have far reaching effects upon the integrity of watersheds, flora, fauna, and soils on any given landscape. Direct effects of roads include roadkill, road aversion, population fragmentation/isolation, pollution, habitat loss, exotic plant invasion, edge effects, and the many aquatic impacts such as sedimentation, runoff, earth slides, flow alteration, and riparian vegetation degradation. Indirectly, roads are associated with almost all forms of wildlife harassment and habitat destruction. Development, domestic animals, increased human harassment, poaching, and noise are associated with roads – activities that native species are negatively affected by or tend to avoid. Also, road densities can lower the habitat effectiveness for many large mammals (Lyon 1983, Thiel 1985, Forman & Alexander 1998, Mech, Fritts, Radde, and Paul 1988, Brody and Pelton 1989). A good example of wildlife aversion to roads is a study done in Arizona and Utah that found cougars avoided

12-1. Your comment has been noted.

Letter 12, Page 2

roads whenever possible and established home ranges in areas with the ' lowest road densities (Van Dyke et. al, 1986). As inferred, landscapes that are 'roadless' or contain very small road densities are almost always more biologically sound than heavily roaded areas. Today in the United States, most roadless lands or lightly roaded areas are confined to high elevation, rugged terrain because of the inability or difficulty in building roads there. Because of the ecological advantages that roadless areas provide, there is a large disproportion of healthy habitats in these mountainous areas. Lightly roaded areas within lower elevation habitats are very important to species that either live or travel through these places. The LCNCA contains a relatively high density of roads. Past ORV use, user-created roads, and poor road planning have resulted in over 135 miles of roads within the BLM portions of the LCNCA. This correlates to a road density over 1.8 miles of road per square mile - a high number indeed. In comparison, the Coronado National Forest, under no special designations, limits road densities to 1.0 mi/mi².

12-2

The road network in any given area is important to take into account when assessing the health and effectiveness of different habitats, including wildlife corridors. Also, the impact of roads can be relatively easily mitigated, through sound planning, local input, and restoration principles, such as those being carried out through this planning process. On any given landscape, there are often roads that are no longer needed, used very little, or do not serve any definable purpose, offering good opportunities for improving the health of the landscape with minimal conflict of interests. With the designation of this area as a National Conservation Area, we must realize that past uses of the transportation system may not, in specific cases, be compatible with the needed management of the area. We recommend that roads that have been user-created, cross riparian areas, do not serve definite purposes, or are in areas of high road density be closed. Alternative 4 best represents these recommendations.

12-3

Thank you for this opportunity to comment on the LCNCA management plan. We look forward to seeing a sound final EIS that strives to protect and preserve the rich biological resources that is holds.

Sincerely.

Matt Skroch Field Director

- 12- 2. The road network was discussed in great detail at the SVPP meetings. Many of your concerns were addressed in the OHV route designation alternatives.
- 12-3. Your comment has been noted. An effort has been made under Alternatives 2, 3, and 4 to minimize roads crossing riparian areas, and to propose closing redundant or unauthorized roads.

Letter 12, Page 3

References

Brody, A.J. and M.P. Pelton. 1989. Effects of roads on black bear movements in western North Carolina. Wildl. Soc. Bull. 17:5-10.

Thiel, R.P. 1985. Relationship between road densities and wolf habitat suitability in Wisconsin. Am. Midl. Nat. 113:404-407.

Forman R.T.T. and L.E. Alexander. 1998. Roads and their major ecological effects. Annu. Rev. Ecol. Syst. 29:207-231.

Lyon, L.J. 1983. Road density models describing habitat effectiveness for Elk. Journal of Forestry 81:592-595.

Sweanor, L.L., K.A. Logan, and M.G.Hornocker. 2000. Cougar dispersal patterns, metapopulation dynamics, and conservation. Conservation Biology 3:798-808.

Mech, L.D., S.H. Fritts, G.L. Radde, and W.J. Paul. 1988. Wolf distribution and road density in Minnesota. Wildl. Soc. Bull. 16:85-87.

Van Dyke F. G., Brocke R. H., Shaw H. G. 1986. Use of Road Track Counts as Indices of Mountain Lion Presence. J. Wildl. Manage. 50(1):102-109.

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Letter 13

| | October 30, 2001 |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Bureau of Land Management |
| | Acting Field Manager, Tucson Field Office |
| | 12661 E. Broadway |
| | Tuscon, AZ 85748 TUCSON FIE |
| | Dear Mr. McIlnay, |
| | I have reviewed the Draft Las Cienegas Resource Management Plan and |
| 13_1 | Environmental Impact Statement and do NOT concur with your recommended alternative |
| 19-1 | (alt. 2). I feel alternative 1 is the best alternative presented. My family and I live in the local area of the NCA and enjoy visiting there in my OHVs (Jeeps). We enjoy "taking in |
| ' | the view" while driving the existing trail network, picnicking, and hiking. |
| - 1 | Alternative 3 is the best "action" alternative presented. My main objection to this |
| 12 2 | alternative is that the motorized trail along the Cienega Creek is severed at the north end |
| 13-2 | of the BLM land. There is approximately ½ mile where the trail designation is changed |
| ı | from "Open" to "Closed" for motorized travel. This cuts a very popular, scenic route |
| | from Hwy 83 to Interstate 10. |
| 13-3 | Your Draft EIS repeatedly refers to an expected increase in recreational use of this area while your recommended alternative would severely limit recreational access and OHV |
| | trails. Limited recreation areas cause overcrowding and may lead to things neither of us |
| | wants to see, things like severe damage to the limited access areas and the "wildcat |
| | roads" your report mentions. |
| - 1 | Your recommended alternative designates "all public lands within the planning area" |
| - 1 | as an area of critical environmental concern (ACEC). I do not see how all the public land |
| - 1 | fits the definition of ACEC. Where is the "national concern"? I understand the concerns |
| 13-4 | along the creek, and this area may warrant an ACEC designation as in alternative 3, but not all public lands. The access restrictions that could arise from ACEC designation are |
| | unacceptable. It is my understanding the push for the all encompassing ACEC |
| - 1 | designation comes from local property owners who expect property values to increase |
| - 1 | with use restrictions. I challenge that the BLM's job is to manage this NCA for the |
| - 1 | enjoyment of all citizens, not just those lucky enough to own adjacent property. |
| - 1 | I would like to see this area continue as it is today: a beautiful open space with multi- |
| 13-5 | use access. Most of the concerns brought up in the Draft EIS can be handled through |
| ., , | enforcement of existing rules. What is the cost of a few additional rangers versus some of |
| ' | your other proposals? Restricting access punishes the many for the misdeeds of a few. |
| | Martine Sindelas |
| | Martin Sindelar |
| | 1296 Cottonwood Drive |
| | Sierra Vista, AZ 85635 |

13-1. Your comment has been noted.

The decision, to restore the Narrows area of Cienega Creek and not allow vehicular or mechanized stream crossings, was made to further protect sensitive vegetation communities which, as a result of successful management practices, have been returning to original marshy conditions. These riparian and aquatic communities also support important habitats for endangered Gila topminnow and candidate Gila chub, which can be harmed by vehicle travel through the area. Marshy conditions make the Narrows area of the creek difficult to cross on foot or horseback and impassable to vehicles most of the time. Vehicles attempting to cross the creek usually become mired down in the mud. Considerable damage is done to vegetation and stream banks and aquatic animals are probably harmed when vehicles are pulled out of the mud. In addition, use of the route by smugglers has increased in recent years and several times as many as five vehicles have had to be removed from the area at one time.

> Proposals to provide northern access for Las Cienegas NCA are not included within the Preferred Alternative, which identifies the Highway 83 and 82 entrances for access. BLM manages only small scattered parcels of public lands in this northern area and most of the roads in the northern portion of the planning area are on State Trust Lands and not open for recreational use except for people hunting

Letter 13 (continued)

- 13-2. (continued) with a valid hunting license or those with a valid recreation permit issued by the Arizona State Land Department.
- 13- 3. This issue is addressed in the recreation analysis, page 4-106 of the Draft Plan. Yes, more environmental damage may occur when use is concentrated. Also anticipated are the potential actions of displaced visitors who cannot find available space to recreate (camp, park) in zones 1 or 2. Many visitors may move to Zone 3 (more than what occurs now). However, there are mitigating steps identified that may be applied to prevent damage to zones 2 and 3 if monitoring indicates use levels have exceeded capacity. A tiered approach will be taken to stop or reduce negative impacts. The steps taken could include increased law enforcement, designating camp sites, implementing a fee/permit system to regulate the number of visitors to various zones, and temporary or permanent closures to allow for rehabilitation of an area.
- 13-4. ACEC designations highlight areas where special management attention is needed to protect important historic, cultural, and scenic values, fish or wildlife resources or other natural systems or processes; or to protect human life and safety from natural hazards. Under 43 CFR 1610.7-2, areas with potential for ACEC designation and in need of protective management must be identified and considered in the planning process. Nominations can be made by either the agency or the public and eligibility of lands nominated for ACEC designation must be considered in the land use plan. In order to be considered a potential ACEC and analyzed in the land use plan alternatives, an area must meet the criteria of relevance and importance, as established and defined in 43 CFR 1610.7-2. Generally, relevance is based on the presence of a significant resource, value, system, process, and/or hazard, and importance is based on whether the resource, value, system, process or hazard has substantial significance and values. The Las Cienegas NCA contains such resources and values of national concern as stated in Section 4 of the Act Establishing the Las Cienegas National Conservation Area.

The proposed Las Cienegas RMP is the entire plan proposed for all public lands in the planning area including the ACEC and NCA. The RMP was designed to include both Land Use Plan allocations and designations as well as management actions so that there would not be numerous additional plans in the future with as yet undetermined management prescriptions. Therefore, all restrictions on uses on ACEC and NCA lands are described in this plan. A new section has been added to Chapter 2: Recreation Management Actions common to Alternatives 2, 3, and 4 which summarizes visitor use restrictions and allowable uses.

13-5. The participants in the SVPP also shared the desire for the public lands in the planning area to remain much as they are now with healthy resources, open spaces, and a variety of multiple uses. The Las Cienegas NCA Act recognizes these desires by not only prescribing conservation, protection and enhancement of the variety of nationally significant and unique resources of the NCA but also prescribing the continuation of dispersed recreation and grazing in appropriate areas. However, in order to achieve prescriptions mandated in the Act and maintain current conditions, while at the same time adjusting to increasing visitation and demands on the resources, some restrictions on human uses are necessary. Enforcement will also be an integral part of the Proposed Action as will continued partnerships with a variety of users.

Letter 14, Page 1



THE STATE OF ARIZONA

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DIRECTOR DUANE L. SHROUFE DEPUTY DIRECTOR STEVE K. FERRELL



November 23, 2001

Mr. David McIlnay Acting Field Manager Tucson Field Office Bureau of Land Management 12661 E. Broadway Blvd. Tucson, Arizona 85748

NOV 2 6 2001

TUCSON MALD OFFICE

Re: Draft Las Cienegas Resource Management Plan and Environmental Impact Statement

Dear Mr. McIlnay:

The Arizona Game and Fish Department (Department) has been a member of the Sonoita Valley Planning Partnership (SVPP) since its inception over six years ago. We have found our participation in this partnership to be a very positive and productive endeavor. The Department commends the Bureau of Land Management (BLM) on the implementation of a communitybased ecosystem planning strategy. The conversation and debate generated as part of this strategy addressed and resolved many issues prior to the publication of the Draft Las Cienegas Resource Management Plan and Environmental Impact Statement (LC-RMP/EIS). The Department supports the Preferred Alternative provided the following issues are addressed and resolved prior to developing the Final LC-RMP/EIS.

Transportation Network

The LC-RMP/EIS does not adequately describe the proposed changes to the existing road network. The only information available is presented at a gross-level scale in the Land Use Plan Alternatives which we believe does not allow for necessary review to determine what specific changes are proposed for any given road segment. For example, the descriptions only discuss changes to the road system by total mileage (Page 2-17, Table 2-4). Associated maps (Maps 2-2, 2-6, 2-13, 2-18) identify those areas that will be affected by changes in the road network, but there is no presentation of the existing road network. It would be helpful if the maps presented the proposed changes overlaid on the existing road network as well as identification of place references. We also request that the Activity Plan Alternatives provide specific text descriptions for each proposed modification to a road segment.

14-3

The Department also requests clarification on the location of the proposed connector road intended to connect two existing roads across Cienega Creek near Bootlegger Well. Map 2-6 appears to present conflicting information about this proposed new road segment.

- 14- 1. Your comment has been noted.
- 14- 2. The route designation maps have been redone at a finer scale and with a topographic background, which should make review of the road designations easier. Map 2-2 depicts the existing road network.
- Map 2-6 has been modified to better show the connector road which would be proposed mitigation if BLM acquires lands in this area and the road crossing Cienega Creek north of the Narrows is closed.

Letter 14, Page 2

Mr. McIlnay November 23, 2001 2

14- 4

The Department has not reviewed any data to support the proposed seasonal closure of the Road Canyon loop road during the antelope fawning season. The Department recommends maintaining this segment as open, year-round until such time as traffic becomes an issue adversely affecting fawn survival.

Livestock Grazing

14- 5

The current Biological Planning Team Process being implemented on the Empire-Cienega Allotment was created and is perpetuated by the lessee. Replicating the Biological Planning Team Process is an important element of Alternative 2; however, the Draft LC-RMP/EIS is unclear about who will be responsible for coordinating and conducting these Team meetings if this alternative is implemented. The Department recommends that BLM assume this role since the continuity and effectiveness of the Biological Planning Team is more likely to persist under the auspices of the BLM.

14-6

The Department is uncomfortable with an open-ended stocking rate as proposed in Alternative 2. We do, however, strongly support the tiered approach to determining livestock numbers based on resource (primarily precipitation) condition. In fact, we would recommend that upper limits for livestock numbers be set for each resource condition. The numbers proposed in Tables 2-21, 2-22, and 2-23 appear to be an appropriate starting place. This modification to Alternative 2 still provides the flexibility of the Empire-Cienega model, while providing some measure of certainty for the maximum number of livestock that the resource condition should support. These maximum numbers can be adjusted at the 5-year interval plan evaluation periods.

Thank you for the opportunity to review the Draft LC-RMP/EIS. We look forward to working cooperatively with BLM during the development of the Final LC-RMP/EIS. Please contact Ms. Sherry Ruther, Regional Habitat Specialist, at (520) 628-5982 ext. 137 if you have questions or require additional information.

Sincerely,

John Chandy

John Kennedy Habitat Branch Chief

JFK:sr

cc: Gerry Perry, Regional Supervisor, Region V, Tucson Sherry Ruther, Regional Habitat Specialist, Region V, Tucson Bob Broscheid, Project Evaluation Program Supervisor, Habitat Branch, Phoenix 14-4. The situation in the Las Cienegas Conservation Area differs from other recent pronghorn studies (for example Ockenfels et al., 1994). Within the planning area truly permanent water sources in suitable pronghorn habitat are very limited. Most earthen reservoirs are dry during the fawning season. Many supposedly permanent wells are active when cattle are present in that particular pasture and are turned off when livestock are gone. The windmill in Road Canyon is, at times, one of two or three available water sources within an 8000acre block of available habitat. Based on field observation, this water is vital to pronghorn during fawning season. It is highly likely, under such circumstances, that human disturbance will significantly reduce pronghorn utilization of this source and, in turn, adversely affect fawn survival.

BLM welcomes and supports any and all efforts by the Department to assess the condition of the local pronghorn herd and develop additional recommendations to maintain and enhance grassland habitat for the species. Due to increased recreational use in the conservation area, continued conversion of pronghorn habitat into fenced, rural subdivisions, and the recent decline in pronghorn numbers, it is prudent to take necessary action to reduce human disturbance around this important water source. If additional investigation reveals that the closure is not necessary then the plan can be modified to remove this provision.

Letter 16, Page 2 (continued)

- 14-5. The BLM intends to continue the Biological Planning Process and pursue structuring the Biological Planning Team as a Rangeland Resource Team. Refer to response 2-1.
- 14- 6. See response 2-2.

Letter 15, Page 1

RECEIVED

C. David Bertelsen 2503 E. Blacklidge Drive Tucson, AZ 85716 November 12, 2001 NOV 1 9 2001 TUCSON FIELD OFFICE

Shela McFarlan, Field Manager BLM Tucson Field Office 12661 E. Broadway Tucson, AZ 85748

> RE: Draft Las Cienegas Resource Management Plan and Environmental Impact Statement

Dear Ms. McFarland:

As a member of the Sonoita Valley Planning Partnership (SVPP) and of the Resource Advisory Council (RAC) for Arizona, I would like to offer the following comments to, and ask questions concerning the meaning and intent of, the above-captioned draft document, hereafter referred to as the Draft EIS. Before commenting, however, I would like to complement the BLM staff who contributed to the Draft EIS. Overall, the document is thorough, well-written, and accurately reflects the concerns of the SVPP. Since notes were made as I read the document, my comments and questions will be listed as they arose.

15-2 1. Chapter 1 provides an excellent discussion of the planning process and accurately reflects the issues and concerns of the SVPP.

2. Chapter 2, p. 33 and p. 47. As far as I know there are no non-native leopard frogs in this part of the country. I would suggest specifying Chiracahua and lowland leopard frogs.

3. Chapter 2, p. 75. The scientific name for plains bristlegrass is *Setaria machrostachya*, so the letter code should be SEMA, not SELE2 (which I presume refers to *Setaria leucopila*).

4. Chapter 2, p. 75. Item number three states: "The input from the Biological Planning Team helps rapidly adjust grazing in response to the health of the resource and the availability of forage." Since the team meets only twice yearly, in spring and fall, the work "rapidly" is an overstatement at best—unless, of course, you are comparing this allotment with those BLM has not assessed in many years. The lessees are on the ground on an almost daily basis, and they are both able and willing to rapidly adjust grazing if the need arises.

- 15-1. Thank you for your comment.
- 15-2. Thank you for your comment.
- 15- 3. Your comment has been noted and the text has been modified.
- 15-4. Your comment has been noted and the text has been modified.
- 15- 5. Thank you for your comment. The text has been modified.

Letter 15, Page 2

5. Chapter 2, p. 79 and p. 81. If livestock grazing is permitted, natural resources should be monitored. Why are the Rose Tree and Vera Earl Allotments. which comprise over 5,000 acres of public land, not being monitored? Is the problem lack of concern for the health of these lands, lack of commitment to the Arizona Standards for Rangeland Health and Guidelines for Grazing Administration (hereafter referred to as the Standards and Guidelines), or lack of resources? 6. Chapter 2, p. 95. The first sentence of item number two under "Cultural Properties..." does not make sense. 7. Chapter 2, p. 99. The spacing of line three in the second column should be 8. Chapter 2, p. 99. Item three in the same column mentions "mineral specimens, ..., petrified wood, invertebrate fossils, and semiprecious gemstones." If the last three items are, indeed, to be found in the area, I see no need to mention them in this document-this could encourage recreational rockhounds to visit the area in greater numbers. 9. Chapter 2, p. 105. Although I strongly agree that reducing utilization levels "to 30-40 % of current year's growth on key perennial grasses" is high desirable, this might very well be far too much in a drought period. Moreover, it is essential that utilization be measured in areas where livestock actually graze, including highly 15-10 l impacted areas, not areas distant from waters. Because of much higher utilization around waters, even a utilization level of 50% could be met only by averaging data from several monitoring sites if the highly impacted sites are monitored. As I see it, in Arizona, a major problem BLM has in measuring utilization is the tendency to average utilization results over a very large area and/or in areas grazed lightly or not at all. 10. Chapter 2, p. 106 (item 6b) and p. 108 (item 7b). Why are twenty-one days allowed to move cattle through crossing lanes? This permits, at least potentially, 15-11 l very high impact on the riparian corridor but encouraging the introduction of invasive species and causing increased erosion and siltation downstream. 11. Chapter 2, p. 109. The last sentence in the first paragraph needs the word 15-12 _{"use."} 12. Chapter 2, p. 111, item 3. Why should BLM "build any needed range improvements" in the proposed Empire Mountains Allotment? The permittee should be 15-13 required to build all range improvements, including fencing. 13. Chapter 2, p. 132. The draft states, "Upland vegetation will be monitored at permanent vegetation transects on the Empire-Cienega and Empirita allotments." Does this mean that there will continue to be no systematic monitoring on the Rose Tree, Vera Earl, and (proposed) Empire Mountain allotments? These allotments include over 7,000

Page 2 of 7

- 15- 6. They are not being monitored because the Bureau has lacked the resources, staff and funding to do so. Under our Bureau allotment categorization process, these two allotments were in good resource condition and current management was considered adequate to maintain the existing conditions. The Rose Tree allotment grazing lease was evaluated and the allotment was considered to be meeting Arizona Standards for Rangeland Health and the lease was renewed. The Vera Earl allotment grazing lease was evaluated and the allotment was considered to be meeting Arizona Standards for Rangeland Health. A decision was issued proposing renewal of the lease for an additional ten years. However, the grazing decision was protested by the Center for Biological Diversity. It is currently pending issuance of the final decision.
- 15-7. Your comment has been noted and the text has been modified.
- 15-8. Your comment has been noted and the text has been modified.
- 15- 9. Your comment has been noted and the text has been modified.
- 15-10. See responses 2-2 and 9-5.

Letter 15, Page 2 (continued)

- 15-11. See responses 2-5 and 2-6 above. We are currently looking for additional ways to reduce impacts of crossing lanes, such as hardening the lanes with gravel and rock and developing alternative upland waters. However, we have still not resolved all the problems with moving the cattle from the east side of the creek to the west.
- 15-12. Your comment has been noted and the text has been modified.
- 15-13. See response 2-10 above.
- 15-14. Under all alternatives the Bureau proposes to complete Ecological Site Inventories on the public lands in the Vera Earl, Rose Tree, and Empire Mountains areas. As a part of this process the Bureau would establish permanent vegetation monitoring sites (as we did on the Empire Ranch). These sites would be used under all alternatives to monitor rangeland health. The Bureau would also implement the utilization limit of 30 40% on both the Vera Earl and Rose Tree allotments and conduct utilization monitoring on at least an annual basis. If forage for livestock grazing was to be allocated and grazing use authorized in the Empire Mountains, utilization would also be monitored there.

Letter 15, Page 3

15-14 cont. acres of public land and should be subject to monitoring. How else can BLM ensure that the Standards and Guidelines are being met? Although this may seem a rather small amount of land compared to the entire planning area, it is significant and should not be ignored. Certainly the State Land Department will do little or nothing to protect the resource. (See also comment 4.)

15-15

14. Chapter 2, p. 137 and p. 141. With regard to Alternative 3, I have some confusion: page 137 indicates "90% less area designated as ACECs" while page 141 states, "less than under Alternative 2, which would have four times more area in ACECs." Do these figures accurately reflect the number of acres in ACECs in Alternatives 2 and 3?

15. Chapter 2, pages 154-155. Although the draft EIS refers to noxious weeds in several places, I can find little mention of invasive (both native and non-native) species as defined by the Executive Order 13112 of February 3, 1999. The term "noxious weed" is, most emphatically, not synonymous with "invasive species": the former term refers to a specific list of plants so designated by the U. S. Department of Agriculture and state departments of agriculture; the latter term is far broader and includes consideration of the impact of such plants on the environment as a whole, not just agricultural pursuits. The Executive Order was issued "to prevent the introduction of invasive species and provide for their control and to minimize the economic, ecological, and human health impacts that invasive species cause." Federal agencies, in Section 2, were ordered in part to " (i) prevent the introduction of invasive species; (ii) detect and respond rapidly to and control populations of such species in a cost-effective and environmentally sound manner; (iii) monitor invasive species populations accurately and reliably; (iv) provide for restoration of native species and habitat conditions in ecosystems that have been invaded; (v) conduct research on invasive species and develop technologies to prevent introduction and provide for environmentally sound control of invasive species; and (vi) promote public education on invasive species and the means to address them."

15-17

16. Chapter 3, p. 14. Map 3-3, although incomplete, seems to accurately depict vegetative types. I am particularly pleased that xeroriparian areas are indicated. The biotic communities in such areas are quite different from the surrounding uplands and true riparian. Xeroriparian sites are rich in species diversity and provide habitat and movement corridors for a number of species.

15-18

17. Chapter 3, p. 15. I doubt the average reader will understand Table 3-7 without indicating that "pz" means "precipitation zone." Moreover, the inclusion of plant codes (e.g., POFR, SAGO, Populus fremontii and Salix gooddingii) seems unnecessary, particularly since only a botanist would understand them and since most of the ecological sites have no key species listed.

15-19 l

18. Chapter 3, p. 15. The discussion of the effect of livestock grazing on the current ecological status of the area is very brief but excellent. Mention should be made

Page 3 of 7

- 15-15. Thank you for your comment. Text has been clarified to reflect that under Alternative 2, 100% of the planning area would be designated as an ACEC. Under Alternative 3 only 10% would be managed under an ACEC designation. This results in Alternative 2 having ten times more area under ACEC designation than under Alternative 3.
- 15-16. That is correct, noxious weed and invasive species are not synonymous. In designating the NCA as a Weed Management Area, BLM is required to prescribe measures to treat those weeds listed on the State of Arizona Noxious Weed List if any were to be found on public lands in the NCA. Plant species that are disruptive to our management actions are considered invasive weeds and do not occur on the State of Arizona Noxious Weed List. BLM will treat invasive weeds, as feasible, in order to meet the objectives of Executive Order 13112 (which is referenced in our management guidance Table 2-1), and text has been added to the plan clarifying this.
- 15-17. The data used to generate Map 3-3 were derived from ecological site inventories conducted on the Empire and Empirita ranches only. Therefore, the map reflects data coverage for these two ranches only. Under the Proposed Alternative, the ecological site inventory will be conducted for the remaining ranches within the planning boundary.

Letter 15, Page 3 (continued)

- 15-18. Your comment has been noted and Table 3-7 has been modified.
- 15-19. Thank you for your comment. The text has been modified.

Letter 15, Page 4

| 15-19 cont. | of the fact that livestock can select for unpalatable species, such as various forbs and shrubs, by reducing competition through consumption of desirable species. |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 15-20 | 19. Chapter 3, p. 21. In the first paragraph of column two, Carex is correctly identified as a sedge. In the third paragraph of column two, however, Carex is listed (incorrectly) with rushes. Stonewort (Chara spp.) is listed in the first and third paragraphs. The genus is not included in Kearney & Peebles' Arizona Flora or in Lehr's A Catalogue of the Flora of Arizona (or the two supplements). Nor is the genus found in the International Plant Name Index, the Gray Index, or W3Tropicos. What is it? |
| 15-21 | 20. Chapter 3, pp. 24-25. The second paragraph of column two states, "Of the 12.5 miles assessed in 2000, 100% were in satisfactory condition" Table 3-9, however, indicates that 92% of the length was satisfactory. Which figure is correct? |
| 15-22 | 21. Chapter 3, p. 47. What kind of ore was mined at Total Wreck? The paragraph on railroads which follows suggests it was silver. |
| ı | 22. Chapter 4, p. 8. The terms "desired conditions" and "desired vegetative conditions" should be defined to be the potential natural community (PNC) of the particular ecological site. Some range conservationists and ranchers would define both terms as plenty of forage palatable to livestock, whether or not the species are native or not. Indeed, I have read Arizona BLM allotment evaluations completed in the last two years that seem to define the desired condition as the status quo. |
| 15-24 | 23. Chapter 4, p. 22. The last sentence in the "Cultural Resource Management" section refers, in the discussion of Alternative 1 impacts to water quality, to "the increased use of the Arizona Trail." The last section on this page is "Recreation Management and the Arizona Trail." The problem is that under Alternative 1, there would be no Arizona Trail. |
| 15-25 | 24. Chapter 4, p. 26. It is highly possible that the increasingly higher water table will encourage sacaton dominance of the Agricultural fields and increased marshy areas, particularly if the canal dikes are breached in places to permit runoff from the uplands to reach the area. Given the rarity of sacaton sites and their importance to livestock grazing, the objective for the Agricultural Fields should be to restore sacaton and marsh habitats, not to provide a group recreation site. |
| 15-26 | 25. Chapter 4, p. 30. Although mineral development might introduce exotic plants (which seems to imply direct introduction), it is much more likely that such development would create conditions facilitating the spread of exotics. |
| 15-27 | 26. Chapter 4, p. 31. It is highly likely that grazing (as well as recreation and drought conditions) is contributing to the spread of Lehmann's lovegrass, and this should be mentioned in the draft EIS. The statement (top of column two) that "overall vegetation conditions are improving under current livestock management" is false given |
| | Page 4 of 7 |

- 15-20. Your comment has been noted and the text has been modified. Chara is a common and widespread macrophytic (large bodied) algae, not a higher plant which may explain its absence from the sources you cite.
- 15-21. Thank you for your comment. The correct figure is 92% of the 12.5 miles of Cienega Creek riparian area surveyed in the year 2000 were in satisfactory condition. Text has been modified. The data in Appendix 2 was the correct information.
- 15-22. That is correct. It was silver that was mined from the Total Wreck mine.
- 15-23. Desired Vegetative Conditions are the same as the Potential Natural Community of an ecological site in this plan. Both these terms can be interpreted as the community desired by the landowner and theoretically this may include either native or exotic species. However, BLM manages for Potential Natural Conditions which includes managing to eliminate exotic species. See also the definition for Potential Natural Community in the glossary.
- 15-24. Thank you for your comment. The text in Chapter 4 has been modified.
- 15-25. See response 4-1.

Letter 15, Page 4 (continued)

- 15-26. Although the Bureau concurs, we feel the statements "introducing exotic plants" and "promoting weed invasions" implies that mineral development would create conditions that would facilitate the spread of exotics. Anytime that land is cleared of native vegetation, exotics can be introduced directly by heavy machinery or indirectly by wind or birds, just to name some examples.
- 15-27. Lehmann's lovegrass is a very successful invasive exotic species and seems to expand under almost all treatments. It has continued to spread across the Cienega and Sonoita Valleys, regardless of the land uses. Technically this grass detracts from the Potential Natural Community rating because the National Resources Conservation Service does not count exotics when calculating the condition score. However it is a tall perennial grass species and does provide excellent watershed cover.

Letter 15, Page 5

| 15-27 cont | the explosion of Lehmann's in the last two or three years. Certainly any "improvement" in cover is not toward PNC. | |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 15-28 | 27. Chapter 4, p. 31. I am very pleased that the draft EIS recognizes that impacts from dispersed recreation increase with increased use. I strongly believe this relationship is not linear, that is negative impacts to vegetation and wildlife increase faster than the increase in recreation. | |
| 15-29 | 28. Chapter 4, pp. 37-38. Although the section on Noxious Weeds is good as far as it goes, the document needs to address invasive species. Lehmann's lovegrass is not a noxious weed—indeed I would question whether there are any noxious weeds in the planning area that present a threat to the ecosystem to the extent that Lehmann's does. (See comment 15.) | |
| 15-30 | 29. Chapter 4, p. 40. Although I would agree that grazing at Cinco Ponds "would directly harm the riparian plant community and the longevity of open water", grazing may also reduce the habitat for bullfrogs–a real plus considering the plight of the Chiracahua and lowland leopard frogs. | |
| 15-31 | 30. Chapter 4, p. 51. The development of the Empire Ranch headquarters could negatively impact the Chiracahua leopard frogs with are now found only in Empire Gulch. | |
| | 31. Chapter 4, p. 59ff . Although brief, this is a very good discussion of utilization as used by range conservationists. | |
| 15-33 | 32. Chapter 4, p. 60. I am pleased BLM recognizes that utilization data does not measure standing cover and recognizes this as "an important factor for many grassland species." | |
| 15-34 | 33. Chapter 4, p. 66. In addition to Chiracahua leopard frogs, turkey vultures frequently roost in the area. Increased visitation could effect both. | |
| 15-35 | 34. Chapter 4, p. 67. A designated road system and improved road access could facilitate the spread of invasive alien species (Lehmann's lovegrass, non-native fish, crayfish, etc.). Twenty years ago, I came across a large pool in a narrow canyon in the Rincons, several miles from the boundary, that had gold fish! | |
| 15-36 | 35. Chapter 4, p. 79. The layout on this page is confusing. The top four lines in column two belong to the first five lines in column one. | |
| 15-37 | 36. Chapter 4, p. 94. The draft EIS states, "BLM must be able to meet the needs and provide the services required by utility companies now and in the future." This is ludicrous as far as the NCA, <i>per se</i> , is concerned and must have been written by | |
| | Page 5 of 7 | |

- 15-28. Thank you for your comment. BLM also assumes that the relationship between recreation and negative impacts to vegetation and wildlife is not linear. In addition, the overall cumulative impacts of all uses makes negative impacts on vegetation and wildlife occur more rapidly than recreation use impact only.
- 15-29. See Response 15-15.
- 15-30. Management for control of bullfrogs is ongoing.

 The presence of large bodies of open water has the potential of attracting bullfrogs. Adaptive management will be used to deal with bull frogs. Allowing these shallow waters to grow over with vegetation may be an option for controlling reproduction of this highly invasive frog, should it become present in the Cinco Ponds (which had occurred as of the preparation of these responses).
- 15-31. We agree with this statement and will work with the USFWS through Section 7 of the Endangered Species Act concerning this species and all activities and actions contained in the draft EIS.
- 15-32. Thank you for your comment.
- 15-33. Thank you for your comment.

Letter 15, Page 5 (continued)

- 15-34. It is very difficult to include a discussion of all aspects of the avian community that exist in the planning area in the EIS. Vultures are under appreciated, yet serve an important role in the removal of carrion and re-cycling of nutrients contained in dead animal tissue. Vultures typically roost, in loosely knit groups, in large trees and on cliffs. These roost sites may change relative to a myriad of factors, including season, time of day, and food abundance. The role of human disturbance in roost abandonment is not fully understood. Vultures sometimes show a high degree of fidelity to a roost site and may be difficult to frighten away. BLM will attempt to locate trails, roads, camp groups, and other developments in a pattern which minimizes disturbance to all raptor species, including turkey vultures.
- 15-35. We agree with this statement and will face the difficult task of preventing and screening for invasive exotic species that may be released on the NCA and adjacent public lands. We will work with the USFWS through Section 7 of the Endangered Species Act concerning this issue as it relates to the draft EIS.
- 15-36. Formatting changes have been made.
- 15-37. Your comment has been noted and the text in Chapter 4 has been modified.

Letter 15, Page 6

| 15-37 Fed cont pul | rights of way specialist wearing blinders. The primary purpose for creating the NCA as to protect not only the resource but also the viewshed. There is nothing in the ideral Land Policy and Management Act (FLPMA) that requires that every unit of blic land be a potential site for utility rights of way. Moreover, I see nothing in The Act tablishing the Las Cienegas National Conservation Area that would suggest that BLM is such an obligation in the NCA. This sentence should be stricken. |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 15-38 in t | 37. Chapter 4, p. 109. Under "Recreation Management," should "Alternative 3 the first line be "Alternative 4," which is what this section discusses? |
| 15-39 hol | 38. Chapter 4, p. 109. The section "Livestock Grazing" states, "Requests to ld large or numerous livestock dependent events would increase." What is the ionale for this claim? What kinds of "livestock dependent events" are envisioned? |
| 15-40 wit ver Pai | 39. Chapter 4, p. 110. The assumption that "social trails" would increase thout a designated Arizona Trail route is dubious at best. Indeed, the reverse could ry well be true since more hikers would be drawn to the area. In Saguaro National ark and Pusch Ridge Wilderness, numerous "social trails" (I prefer the term "wildcat ills") has been developed in spite of an extensive network of official trails. Eliminating discouraging wildcat trails is an on-going task, the same as with wildcat roads. |
| 15-41 _{und} | 40. Chapter 4, p. 116. Impacts from undocumented aliens should be discussed der "Unavoidable Adverse Impacts." |
| 15-42 par Val | 41. Chapter 5, p. 2. Although "Workshop participants decided to have the rtnership deal only with issues involving public lands surrounding the Sonoita illey", I believe the participants included state lands in the category of "public lands" hough state lands, of course, are not public lands. |
| 15-43 dis BL not | 42. Appendix 2, p. 5. Executive Order 13112 should be mentioned in the scussion of Vegetation Management. Unfortunately it has been my experience that M and the Forest Service are quite unfamiliar with the Order and are doing little or thing to implement it. |
| 15-44 and site | 43. Appendix 2, p. 27. Another objective should be "Prevent the introduction d control non-native invasive species in the ACEC" or "Maintain or improve ecological e similarity to potential natural community"? |
| 15-45 | 44. Appendix 2, p. 52. In the last paragraph, what is "Map X"? |
| 15-46 suc | 45. Appendix 2, p. 53. The "Unit Size" section mentions maximum fire size in roadleaf riparian areas." What evidence is there that any fire is a positive factor in ch areas? Should not all burning in broadleaf riparian areas be suppressed? |
| | Page 6 of 7 |

- 15-38. Your comment has been noted and the text in Chapter 4 has been modified.
- 15-39 Currently, BLM receives many permit requests for equestrian events such as riding clinics, dog trial events, organized trail rides numbering between 20 to 60 riders, and horse endurance rides including 20 to 100 horse riders. BLM's experience in managing the San Pedro NCA has been that even though cattle grazing is no longer authorized, horseback use steadily increased because of the NCA status and promotion of the area. The knowledge that no grazing would be authorized (under Alternative 4) might initially attract more recreationists. Visitors may anticipate the use of the existing infrastructure left over from grazing development, such as corrals, watering sources and cattle trails.

Letter 15, Page 6 (continued)

- 15-40. BLM receives inquiries from people who want to use the Arizona Trail, and others asking where to hike, ride or bike, even though there is currently no designated segment of the trail in the NCA. Currently hikers are asked to follow roads, pending the outcome of a trail alignment. Some already have expressed interest in guiding bicyclists through the narrows, an area that will be restored and where motorized or mechanical use will not be allowed. Others want to follow the creek, use some roads, or traverse cross country. The NCA will invariably be promoted at a national level, where promotion of recreation uses could conflict with some of the NCA's desired conditions such as the more primitive conditions prescriptions. It is anticipated that the NCA will be promoted by those marketing their personal business including recreation tourism web sites, books, brochures and other forms of advertising. Visitor use is expected to increase as the area becomes more widely known. When a trail is identified to channel use to a specific area, most people tend to stay on trails. If an established trail is in place most visitors will use it and stay on it. If there are no established trails, as often seen in other areas, random social trails can appear in undesirable areas, such as along riparian corridors or to sensitive archeological sites.
- 15-41. Thank you for your comment. Text has been added in Chapter 4 to describe the unavoidable adverse impacts of undocumented aliens.
- 15-42. You are correct, workshop participants did want to address both BLM lands and State Trust lands as public lands although State Trust lands are not public lands. However, the LCRMP prescribes management only for BLM managed public lands.
- 15-43. Text has been modified to reference Executive Order 13112 in Appendix 2 Management Guidance.
- 15-44. An objective has been added for the ACEC that addresses invasive species.
- 15-45. An objective has been added for the ACEC that addresses invasive species.
- 15-46. Riparian areas bounded by relatively gentle topography and surrounded by semidesert grassland are going to burn even with a full suppression policy in place. The natural state of Cienega wetlands was one of frequent burning, such as the case with the surrounding vegetative community on the floodplains and uplands. Fire suppression has altered the plant community in favor of larger, older trees which would have been reduced to snags on a regular basis under normal fire frequencies of five to seven years. Much of the vegetation will be protected by humidity, and short stature during prescribed burning. This is neither meant to be beneficial or adverse to broad leaf riparian areas, but rather to recreate a vegetative community (Potential Natural Community) that is adapted to and appropriate for the ecological processes operating in the ecosystem including fire, flood, and elevated water tables.

Letter 15, Page 7

15-47

15-51

46. Appendix 2, p. 64. Although there is some debate as to whether traditional composition/production/utilization measures are adequate to accurately monitor ecological sites, the location and timing of any measurements are crucial in determining the true condition of a site. None of the traditional measures described in the "Upland Vegetation Monitoring" section provides a true measure of biodiversity and none is adequate by itself or in combination to determine how closely a site "mimics" the PNC of an ecological site. The Santa Rita Experimental Range, for example, has low utilization, high production, adequate composition, and good cover, but it is a far cry from the PNC—it is NOT a healthy grassland. The traditional measurers of rangeland health are inadequate in determining whether sufficient stubble height/cover remains for wildlife or whether invasive, non-native species are causing problems. The traditional measures are too often used to define a "desired plant community" without regard of the PNC.

15-48 47. Appendix 2, p. 71. My name is misspelled (as it is in Appendix 5, p. 9).

48. Appendix 3, pp. 45-46. Species names for Agave, Cylindropuntia (the new genus name for chollas), Manzanita, Nolina, Opuntia, and Yucca should be provided—there are not that many species as may be true of Aristida, Carex, Cyperus, or Juncus.

49. **Appendix 3, p. 46.** Although they are given different common names, Bothriochloa barbinodis is the new name for Andropogon barbinodis, i. e., they are one and the same species.

50. Glossary. A xeroriparian area is not really a "streamside area" (which primary and secondary flood plains would be). Rather it is an area in a drainage (similar to, but usually deeper than, a swale) in which the vegetation is denser and generally more robust due to increased moisture. There is often not a channel, per se, and there may never be a visible flow. In some cases there is subsurface water.

Thank you for the opportunity to comment on the draft EIS.

Sincerely.

C. David Bertelsen

Page 7 of 7

- 15-47. The BLM has an array of acceptable methods for the collection of vegetation attributes, including stubble height/cover. These methods are in accordance with our interagency technical references. BLM has tailored the methods to the local situation on Las Cienegas. This is what is referenced in the appendix.
- 15-48. Your comment has been noted and the spelling of your name has been corrected.
- 15-49. The list of species is not intended to be a complete list of those that occur on the NCA. Rather, it is a reference list of the scientific names of plants and animals which are included in the text of the RMP. Since the names of particular species for Agave, Cylindropuntia (cholla), Manzanita, Nolina, Opuntia, and Yucca are not mentioned in the RMP, only the genus names have been included in the table.
- 15-50. Text has been corrected in Appendix 3.
- 15-51. The definition of xero-riparian has been modified.

Letter 16, Page 1



Center for Biological Diversity

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SENT BY EMAIL AND ORDINARY MAIL

November 21, 2001

Mr. David McIlnay, Acting Manager BLM Tucson Field Office 12661 E. Broadway Road Tucson. AZ 85748

Dear Mr. McIlnay,

RE Las Cienegas National Conservation Area draft EIS

GENERAL COMMENTS

16- 1

The EIS is confusing as it applies in an unclear fashion to three overlapping planning areas. First there is the the Sonoita Valley Acquisition Planning District (SVAPD) established by the enabling act to acquire state and private lands into federal ownership. Roughly co-extensive with the SVAPD is the "Planning Area" for the proposed Resource Management Plan (RMP).

This leaves out some private lands in the SVAPD in the north, but includes other private lands past the mid-east boundary of the SVAPD for no clear reason. Finally within both planning areas, the actual NCA itself lies largely in the southern part of the SVAPD and consisting of most but not all BLM lands within the SVAPD and "Planning Area"

NEPA

ARRAY OF ALTERNATIVES "UNREASONABLE"

"NEPA's purpose is to protect the environment, not the economic interests of those adversely affected by agency decisions." <u>Nevada Land Action Ass'n v. United States Forest Service</u>, **8** F.3d 713, 716 (9th Cir. 1993)

An environmental impact statement must "(r)igorously explore and objectively evaluate all reasonable alternatives." 40 CFR 1502.14(a). "An appropriate series of alternatives might include dedicating 0, 10, 30, 50, 70, 90 or 100 percent of the Forest to Wilderness." (CEQ 1981)

16-2

The alternatives have been constructed in an unreasonable fashion. In particular alternatives 1-3 all dedicate over 80% of the federal lands to livestock, while alternative 4 has no grazing on federal lands. The problem with alternative 4 is that the highly dissected boundaries of BLM lands would have to be fenced on over 100 miles of boundary, at great

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CBD comments on Las Cienagas RMP/EIS page 1 of 31

- 16-1. The planning area was selected to correspond to the Empire-Cienega long term management area which was established in the Land Tenure Amendment to the Safford RMP in 1991. Near the end of this planning process, which was to involve lands composing the Empire-Cienega Resource Conservation Area, Congress created Las Cienegas National Conservation Area, and also designated the Acquisition Planning District. During the legislative process, however, negotiations about the boundaries for the NCA and Acquisition District resulted in boundaries that do not exactly overlap with those of the original planning area.
- 16- 2. The EIS meets the CEQ regulations for implementing the procedural portions of NEPA (40CFR 1501.2 (c)) which state that an agency must "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources as provided by Section 102(2)(E) of NEPA". The Las Cienegas RMP was developed using a collaborative public planning process to identify the range of alternatives to be considered in managing the public land resources and uses in the planning area. The Las Cienegas RMP does not identify any unresolved conflicts that have not been adequately

Letter 16, Page 1 (continued)

16-2. (continued)

analyzed in the EIS. The RMP analyzes a full range of alternatives for the various resources and uses on public lands in the planning area. For example, the grazing alternatives include current livestock management; adaptive livestock management with flexible stocking rates and management strategies; the traditional agency approach to livestock management with conservative fixed stocking rates; and removal of livestock grazing from public lands.

Letter 16, Page 2

expense, to implement alternative 4 and so isolate all federal lands from adjoining state trust grazing leases and private ranchlands.

Although the BLM holds the state grazing leases on Empirita and Empire Cienaga ranches, it is currently not a simple option to end or greatly reduce grazing on these lands which are administered under state statute by the state lands department. Unless the BLM runs cows on the state leases, they could be turned into commerical leases or put up for

However, a lawsuit pending before the state supreme court could change this situation entirely and allow the BLM to lease state lands at grazing rates but for conservation (i.e. cow-

16-3

By constructing alternative 4 in this absolute way, the BLM has created a "straw man" easy to knock down and by so doing violates the NEPA requirement that the alternatives be reasonable. We hope the BLM is not simply to evade the scientific and regulatory necessity of greatly reducing livestock use on these lands, contrary to the purpose of NEPA.

A central claim of the EIS is that by ending grazing on the federal portions, per alt 4, BLM will somehow lose control of management on the State Leases that it holds and ranches will become non-viable leading to more subdivision (p. 4.21), and management would somehow revert to "traditional grazing practices" leading to worse ecological degradation on state lands. All logic and available science is turned on its head with the specter that ending grazing on BLM lands would make everything worse in the watershed! This is an alarmist and spurious argument. In the description of alternative 2 the BLM develops a system of adaptive stocking applied to state leases under the BLM's control. Why is this adaptive stocking system not also applicable in alt. 4 with the BLM still holding the same leases? If present sublessees don't like BLMs terms and conditions for grazing state leases, then others no doubt could still

16-5

The only permittee likely to be significantly affected by closure of BLM lands to grazing is the lessee for Empire Cienaga, who does not even own base property. So how is losing the BLM lease for this allotment going to result in a rash of subdivision? The EIS conveniently 16-6 omits mention of the enabling act's mandate to acquire lands to prevent urban development. This strong feature would be available to prevent urban development under all alternatives. The analysis of the impacts of the no grazing alternative is not objective or founded in real data or research, but founded on myths. The prime directive that drives the whole NEPA process is clearly "[k]eeping ranches viable" (p. 4.21), not ecological recovery and protection of threatened habitats and species. This is a violation of the "objectively evaluate" obligation

of NEPA as well as other applicable law.

16-7

16-8

An intermediate alternative should have been developed which would have excluded livestock from most federal lands but in such a fashion as to minimize additional fencing required. The map further below shows an more reasonable alternative which the BLM could have developed. Closing pastures of entirely BLM land that are already fenced, and adding short stretches of additional fencing in such a fashion as to leave State Lands and

CBD comments on Las Cienagas RMP/EIS page 2 of 31

16-3. The No Grazing Alternative (Alternative 4) is a realistic approach to constructing an action that would allow the Bureau to cancel livestock grazing on all public lands within the planning area. There are an unlimited number of alternatives that could be constructed. The Bureau has worked with the interested public for five years to allow identification of feasible alternatives as described in response 16-2. These alternatives also follow 43 CFR 1610.4-5and current policy and guidelines.

> We agree it might initially be expensive to fence all the public lands from the adjacent lands, but it is feasible and would represent a clear alternative to the Bureau's authorization of livestock grazing on the public lands. We recognize that many other options to fence portions of the public lands exist and that construction of less than half this amount of fencing would exclude livestock from the majority of public lands. However partial fencing would still allow livestock access to some parcels if grazing continues on the surrounding lands. This variation has been added to Alternative 4 in the Proposed RMP/Final EIS.

16-4. Adaptive stocking rates are not analyzed in Alternative 4 because this Alternative analyzes a no -grazing system. In addition, if the federal lands are removed from livestock grazing and grazing is to continue on the adjacent state and private lands, the ranches would need to be reconfigured. The Bureau managed lands tend to divide the valley east and

Letter 16, page 2 (continued)

16-4. (continued)

west along Cienega Creek, and north to south from the Whetstone Mountains to the Santa Rita Mountains. Thus if the public lands (approximately 50,000 acres) are removed from ranching use it would tend to create four quadrants of state (approximately 100,000 acres) and private lands (approximately 50,000 acres) with the federal public lands in the center. This would topographically create seven areas to either assemble as smaller ranches or place into residential subdivision. The smaller ranches would tend to be less viable. There would be less opportunity to design progressive grazing management strategies on these smaller units and they would be less desirable to the serious ranchers. A progressive adaptive stocking strategy and flexible rotation becomes more difficult for a rancher to develop as the resource base decreases. This is simply because there are fewer options available.

While the Bureau currently holds the grazing leases on the Empire and Empirita ranches, it is only a lessee and has no management control of State Trust Land. The Arizona State Land Department has its own mandates to manage the various trust properties under its responsibility. It would be speculative to assume that the state would subdivide these larger leases into smaller ones and allow the Bureau to continue as the primary leaseholder once federal lands are withdrawn, much less allow the Bureau to approve the lessees on the state leases. The lawsuit referenced in your letter has not been resolved through the court system and, again, it would be purely speculative to assume that the state would make these lands available for conservation leases or uses. Text has been added in several sections of Chapter 4 noting the variety of scenarios which could occur with management of State Trust Lands.

- 16-5. As stated above, since the public lands are located in the center of the planning area, removal of the public lands from grazing would segment the area into four quadrants, leaving four smaller areas with which to create viable grazing units. It would be much more difficult to implement progressive grazing management on these smaller, less desirable parcels. It would also be difficult to create any economically viable grazing units with these smaller land parcels. Again, these parcels are composed of primarily State Trust lands and private lands. If they are not economically viable as ranches, it is likely that they will become residential property in the future.
- 16-6. BLM has developed an Acquisition Strategy to guide acquisitions of lands or conservation easements within the Sonoita Valley Acquisition Planning District. The Acquisition Strategy has been incorporated into the RMP for alternatives 2, 3, and 4. It includes criteria for prioritizing acquisition parcels and identifies both traditional and non-traditional methods that could potentially be used to acquire lands or conservation easements.

Letter 16, page 2 (continued)

- 16-7. The discussion centers around the viability of the ranch units because unless the ranch units are a viable economic venture, the land may ultimately be put into other economic land uses. As the ranches are fragmented into smaller units with less land available for grazing they become less attractive to ranchers. The current economic conditions which make these properties viable as ranching units are the dominant force holding the state, private, and public lands together as open, undeveloped land units. It is this "open" grassland landscape that the participants in the Sonoita Valley Planning Partnership, and many other interested individuals and groups are attempting to preserve.
- 16-8. See also response 16-2. There are potentially an unlimited number of alternatives or variations to alternatives which could be analyzed. During development of the Land Use Plan and EIS, which lasted over a period of five years, the Bureau tried to analyze a range of alternatives that considered a variety of different possible land uses and conformed to CEQ regulations.

Letter 16, Page 3

some BLM lands open to grazing would present a cost effective alternative that would greatly reduce grazing on BLM land.

NO PRIORITY ACQUISITION OR CONTINGENCY

16- 9

Priority land swaps and acquisitions which are mandated by the enabling act, should have been proposed as part of the alternative development process, to eliminate much of the intermixed nature of present landownership. This would allow for more cost effective livestock exclusion from most federal lands and make alternative 4 or a similar alternative much more feasible.

16- 9

How lands are acquired into Federal ownership in future will significantly affect the feasibilities of different alternative, or even suggest new ones. At the least the Plan should contain a provision requiring complete Plan revision if key lands are acquired. An alternative could have been developed based upon successful completion of a priority acquisition program.

NO WILDERNESS CONSIDERATION

16-10

FLPMA directed the Secretary to consider not only of roadless areas of greater than 5000 acres as potential wilderness study areas, but also "roadless islands of the public lands." (43 USC 1782 (a)) The rejection of any wilderness consideration for these lands in the EIS pp 1.21-1.22 ignores this crucial statutory obligation. The EIS must review whether roadless islands exist which could qualify for wilderness designation. Certainly the large block around middle Gardner Cyn, which not coincidentally is also a key pronghorn area, may qualify as a

Whether a presently roaded area is potentially a roadless area or island depends upon future road closures. If any road closures will result in creation of roadless "islands" or >5000 acre roadless areas, then that area should be considered for as a valid WSA.

WOODY INVASIONS AND FIRE

16-11

16-12

16-13

All alternatives including the no grazing alternative are described as entailing extensive mesquite removals, primarily on Empire Cienaga which has has the largest areas of encroachment. Is the purpose of these removals intended just to create more forage for cows?

Livestock grazing is recognized as the major factor causing the present level of woody encroachment of the former grassland and savannah that dominated the valley (pp. 3.15-17)

Cattle are fire suppressive and along with active fire suppression by agencies, have cause a massive shift toward woody plants like mesquite throughout the western US (see discussion below). Restoration would simply require removal of livestock and ending active fire suppression. The greatest factor causing erosion after fires is livestock as admitted in the EIS (p. 4.8). Resistance from landowners in the area (p. 4.12) could be addressed by maintaining back-burnt fire buffers, a combination of prescribed and natural fire regimes.

Climatic change due to global warming must also be factored in to consideration of woody invasions and fire cycles.

CBD comments on Las Cienagas RMP/EIS page 3 of 31

16-9. See response 16-6.

16-10. The statutory requirements of FLPMA and the Wilderness Act of 1964 have been met through BLM's review of the planning area to determine whether any lands therein have wilderness characteristics. Present direction for inventories, including wilderness character, is provided by FLPMA in Sections 102, 201, and 202. These sections direct BLM to "preserve and protect certain public lands in their natural condition" and to "prepare and maintain on a continuing basis an inventory of all public lands and their resources and other values (including, but not limited to, outdoor recreation and scenic values), giving priority to areas of critical environmental concern."

Wilderness characteristics criteria are found in Section 2(c) of the Wilderness Act, which says in part, "An area of wilderness is further defined to mean in this Act an area . . . which . . . (3) has at least, five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition" BLM's Wilderness Inventory and Study Procedures Handbook, H-6310-1, additionally states that "the size criteria will be satisfied for inventory areas in the following situations and circumstances:

. . Roadless areas of less than 5,000 acres of contiguous public lands where any one of the following apply:

Letter 16, page 3 (continued)

16-10. (continued)

- (1) They are contiguous with lands which have been formally determined to have wilderness or potential wilderness values, or
- (2) It is demonstrated that the area is clearly and obviously of sufficient size as to make practicable its preservation and use in an unimpaired conditions, and of a size suitable for wilderness management, or
- (3) They are contiguous with an area of less than 5,000 acres of other Federal lands administered by an agency with authority to study and preserve wilderness lands, and the combined total is 5,000 acres or more."

In the review process, BLM identified potential inventory areas bounded by roads, non-public lands, or rights-of-way. The largest area so bounded on Las Cienegas has just over 4,000 acres of BLM lands and is bounded by a State highway on one side and a graded dirt road thoroughfare on two sides. Neither that area nor any of the smaller potential inventory areas met any of the above criteria, eliminating the need for any further evaluation of wilderness characteristic criteria.

The plan does not identify any future road closures that would create a roadless area of more than 5,000 acres. Also refer to page 1-21 of the Draft Plan regarding Wilderness.

16-11. The purpose of any mesquite removal would be to meet the vegetation objective for achieving the desired plant communities on appropriate ecological sites. Where mesquite has invaded into open grasslands sites the objective would be to reduce this condition. While it may produce more livestock forage, it also produces more desirable antelope habitat and better watershed condition. Thus, this action is proposed in Alternative 4, under which livestock grazing would not even be an authorized use.

Letter 16, page 3 (continued)

- 16-12. If cattle are allowed to graze heavily, they can remove the fuels that carry fire through the plant community. Under current management, and in all proposed alternatives, vegetation objectives and management guidelines have been established that will allow fire to be used as an active process where applicable, along with appropriate livestock numbers and utilization levels. With appropriate utilization levels and livestock numbers, sufficient fuels are left to carry fire through the plant communities. This is turn, allows fires to be prescribed to support the restoration of appropriate vegetation communities. As an example, a recent wildfire burned approximately 4,600 acres along Cienega Creek and the adjacent uplands. This fire occurred after the growing season, and after livestock had already grazed the pastures but sufficient fuels were left to carry the fire over an extensive area. If livestock grazing is allowed in areas too soon after the occurrence of fire, they can increase soil erosion and cause considerable damage to the plant communities. It is our intention to rest areas from livestock grazing until those ecological sites have recovered. This is another value of the larger grazing units that would offer more opportunities to change proposed livestock rotations due to unforseen events and for the biological planning process that provides an opportunity to adjust livestock strategies and/or numbers when these unforseen events occur.
- 16-13. See response 10-5 above.

Letter 16, Page 4

GLOBAL WARMING

Multi-agency reports about impacts of global warming, are available but the EIS fails to consider the impacts of grazing in the context of this likely future environment (Southwest Regional Assessment Group, 2000). Rather the EIS is founded in the untenable assumption that climate will continue much as it is now with occasional droughts.

16-14

Temperatures in the southwest are predicted to rise 2-3?C by 2030 while rainfall especially in winter is expected to increase due to increased frequency and persistence of El Niño events. This is expected to "increase the number of floods, [and] accelerate rates of soil erosion" (SWRAG 2000 p. 3). The authors warn that "There have been significant long-lasting declines in the productivity and condition of many semi-arid rangelands, after various combined impacts of drought and heavy livestock use. The combination of low plant cover (especially after drought) and the sometimes intense rainfall events...can cause severe soil erosion."

They also warn not to expect greater productivity of rangelands to result because "the correlation between productivity (of forage or of other plants) and precipitation is not always strong" and because of "idlesertification, or the long-lasting deterioriation of semiarid ecosystems" in the Southwest (SWRAG 2000 pp. 31-31).

Increased winter rainfall may instead help to accelerate woody encroachment already a problem on this allotment (Brown et al. 1997) and increase risk of wildfires, further worsening soil loss and impaired air quality from increased dust in the air, a possibility neglected in the EIS (SWRAG 2000 p. 32).

The BLM failed to develop and analyze the alternatives considering an increasing risk of erosion and disruption of vegetative health.

Also ignored is the expected impact of warming on plant phenology resulting in earlier spring growth which could make reliance on "deferred" grazing schedules meaningless.

A PROPOSED RESTORATION ALTERNATIVE

16-15

We propose that the EIS be withdrawn and more reasonable "restoration" alternative be developed and analyzed with the following essential features (see figure next page):-

- ?? Fenced exclusion of most if not all Federal lands from livestock on the Empire Cienaga allotment
- ?? Fenced exclusion of all BLM lands from livestock on the Vera Earl allotment.
- ?? Maintain BLM lands on Empirita allotment excluded by herd management
- ?? Maintain BLM lands on the Empire Mtns excluded by herd management
- ?? Priority acquisitions of state trust lands (as indicated) that expand protection around riparian habitat and provide wildlife corridors, to be added to livestock exclosure as acquired

CBD comments on Las Cienagas RMP/EIS page 4 of 31

- 16-14. Global climate change is a well documented phenomenon. However, scientists do not completely understand global climate change and cannot accurately predict what its impacts might be in southern Arizona. There is even less certainty about what, if any, impacts global warming might cause in the planning area. As conditions affecting the ecosystem process, such as rainfall, air and soil temperature and evaporation rates, change all uses will have to be adjusted to the extent necessary to protect ecosystem integrity. Should the situation become severe, adjustments could include curtailment of grazing, and changes in certain types of recreational activities. In general, land management in the context of global warming will have to be "adaptive" relative to changing conditions and the best scientific information available at the time.
- 16-15. Your proposed Restoration Alternative appears to be a variation of Alternative 4. The following features in your Restoration Alternative are already included in Alternative 4 in the Draft Plan:
 - * Fenced exclusion of public lands from livestock on the Empire-Cienega, Empirita, Vera Earl, and Rose Tree allotments.
 - * Priority acquisitions of State Trust Lands (an acquisition strategy for lands with the Sonoita Valley Acquisition Planning District has been developed and incorporated into Alternatives 2, 3, and 4).

Letter 16, page 4 (continued)

16.-15. (continued)

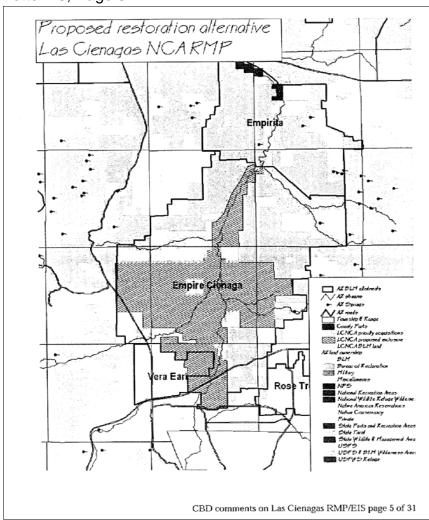
- * No livestock crossings of permanent creeks and no watering access points at natural springs or riparian zones (as no livestock would be present on the allotments).
- * Restriction of the Trail to existing roads or trails.
- * Mineral withdrawals as in Arizona Alternative 2.
- *Recreation zones 1 and 2 are not within 1/4 mile of permanent water in Cienega Creek.

We have incorporated your ideas regarding a phased in approach to removal of livestock from public lands into Alternative 4 which would result in less fencing being required and additional restrictions on livestock use of riparian areas in the interim while the use was phased out. We have also incorporated the potential scenario of conservation use of State Trust lands into the variety of potential management scenarios for State Trust lands under Alternative 4.

As discussed in response 10-5, there are several factors which preclude the option of letting wildfires burn on public lands under any alternative including urban interface issues, resource concerns, and current policies. Hunting use is regulated by the Arizona Game and Fish Commission. Alternative 4 is the most restrictive of the four alternatives on motorized recreation and access.

Chapter 6: Public Comments and Responses

Letter 16, Page 5



Letter 16, Page 6

- ?? No livestock watering access points at natural springs or riparian zones.
- ?? No livestock crossings of permanent creeks except by truck, or on concrete or gravel crossings or bridges. Only one crossing per allotment.
- ?? Closure of all but several major trunk routes to all motorized access, and conversion of some closed roads to trails to retain non-motorized access. Prohibition of entry to any motorized vehicle not licensed for street use onto the NCA.
- ?? Livestock utilization for a minimum stubble height of 6 inches on federal and state rangelands.
- ?? Restriction of the Arizona Trail to existing roads or trails.
- ?? No expansion of existing utility corridors.
- ?? Natural fire "unmanagement" or "let it burn" policy except for ¼ mile around buildings. Back burning of firebreaks around buildings.
- ?? Mineral withdrawals as in Alt 2.
- ?? No recreational or hunting entry away from designated open roads more than 50 yards into pronghorn fawning areas during fawning season. Designate zone 1 &2 recreation sites away from all areas of likely wildlife conflicts, and not within ¼ mile of permanent water on Cienaga Ck.

GRAZING

THE SCIENTIFIC RECORD

16-16

The enabling Act requires the Plan to have "provisions designed to ensure the protection of environmentally sustainable livestock use on appropriate lands within the Conservation Area:" (6(b)(7))

All available science brings into doubt the very conception of "environmentally sustainable livestock use." There exists no published peer reviewed science which shows that a particular economically viable livestock management regime other than complete removal of livestock is environmentally sustainable in the sense of avoiding possibly irreversible harm to natural ecosystems. Every available study shows otherwise. Historically livestock have resulted in massive soil loss and vegetative shift in southwestern ecosystems.

"Probably no single land use has had greater effect on the vegetation of southeastern Arizona or has led to more changes in the landscape than livestock grazing range management programs. Undoubtedly, grazing since the 1870s has led to soil erosion, destruction of those plants more palatable to livestock, changes in regional fire ecology, the spread of both native and alien plants, and changes in the age structure of evergreen woodlands and riparian forests." (Bahre 1991).

Stephen Yool comparing Chihuahan desert exposed to long term grazing with areas recovering from the first atomic bomb blasts, found significant recovery in the blast area, but

CBD comments on Las Cienagas RMP/EIS page 6 of 31

16-16. This mandate would be achieved through actions designed to accomplish our resource objectives, as stated in the Land Use Plan. We are in the process of successfully reaching these objectives on the Empire-Cienega Ranch. Locations exist where riparian areas are being restored as habitat for endangered fish and wildlife, barren sand washes are being stabilized with the return of perennial grasses, and desirable perennial grasses are returning to upland areas where they had been removed by past grazing practices.

Letter 16, Page 7

little in the grazed areas (Yool, 1999). He concluded that grazing damage was more severe than nuclear bomb damage.

Riparian impacts

Healthy streams in the Southwest usually have a narrow, deep channel. Sediment-capturing grasses and galleries of willow, box elder and cottonwood forests stabilize the stream banks. This "riparian" habitat dissipates high stream-flow energy that otherwise can be destructive and provides the water, food, shade, nesting sites or cover for about 80 percent of all wildlife in Arizona and New Mexico (Ohmart 1982 1996, Chaney et al. 1990).

But livestock, particularly cattle, have a dramatic impact on these fragile areas, trampling and abraiding stream banks, snapping tree seedlings and denuding vegetation by devouring grasses, seedling trees and other leafy green plants. Riparian vegetation provides the bulk of forage for livestock, which only reluctantly move far from water (Holechek 1998, p. 256). A 1994 U.S. Bureau of Land Management report estimated that livestock had "damaged" 80 percent of the West's riparian areas (U.S. Bureau of Land Management 1994).

Belsky and others (1999) reviewed more than 120 published scientific studies on the effects of livestock grazing on riparian areas and their report found:

- ?? Reduced herbaceous cover, biomass, productivity and native species diversity (14 studies).
- ?? Reduced diversity and abundance of native reptiles and amphibians (four studies).
- ?? Wider stream channels, less stable banks, higher peak water flows (16 studies).
- ?? Reduced soil fertility, water infiltration and resistance to erosion (12 studies).
- ?? Higher water temperature and lower dissolved oxygen (five studies).
- ?? Reduced tree and shrub cover and biomass (eight studies).
- ?? Shift from cold-water fish and aquatic invertebrates to warm-water species (eight studies).
- ?? Higher water loads of sediments, nutrients and pathogens (10 studies).
- ?? Lower water tables (two studies).
- ?? Shift from riparian bird species to upland-generalist species (six studies).

The Belsky report stated that an "... extensive literature search did not locate peer-reviewed empirical papers reporting a positive impact of cattle on riparian areas."

Similarly, Ohmart's 1996 study concluded: "... there is not a single grazing management approach that has produced consistent improvements of degraded riparian-wetland areas."

(Elmore & Kauffman, 1994) found that the much vaunted "winter-only grazing" on riparian areas still resulted in significant damage and prevented full recovery of riparian natural vegetation.

Other scientists have come to similar conclusions. Two separate studies found that tree seed and sapling survival rates were reduced up to threefold in grazed riparian areas in Southeastern Arizona compared with those devoid of livestock (Glinski 1977, Szaro 1983).

CBD comments on Las Cienagas RMP/EIS page 7 of 31

Page 6-58

Letter 16, Page 8

Also in Southeastern Arizona, an ornithological study found negative livestock-grazing impacts on 17 of 43 neo-tropical migratory bird species (Bock et al. 1992).

Riparian areas can recover from the damages of livestock grazing if livestock are removed. Trout recovered significantly in Pacific Northwest streams closed to livestock (Bowers, et al. 1979); and riparian canopy-dependent bird species increased 20-fold along the San Pedro River after cattle were removed in 1986 (Krueper 1993).

Watersheds

Impacts of livestock on stream and water conditions go well beyond just immediate impacts to riparian areas. Impacts across the watershed affect stream and water quality. Conversely, damages to riparian areas extend out to entire watersheds.

Livestock grazing, even at modest levels, in upland areas of watersheds is found to produce greater soil erosion. This effect is greatest when the grazing occurs during a rainy season (Smiens 1975). The phenomenon has three basic components. First, grazing reduces plant cover that binds the soil and, in low desert areas, destroys microbiological soil crusts that stabilize soil surfaces (Beymer and Klopatek 1992, Brotherson, et al. 1983, Brotherson and Rushforth 1983). Second, vegetation that impeded overland flow of rainfall runoff in intact watersheds was lost to grazing (Sharp, et al. 1964). Third, grazing livestock compact the soil, so instead of rainfall soaking down toward the aquifer it flows faster and in greater volume overland (Arnold 1950, Johnson 1956; reviewed by Belsky et al. 1999, Jones 2000). Eroding soil and manure throughout watersheds end up in streams as increased sediment load, excessive nutrients and pathogen contamination. Various grazing management strategies have not been found to reduce such watershed degradation (Gifford and Hawkins 1976, Blackburn et al. 1982).

The converse effect is the dropping of water tables that results from stream down-cutting in grazed riparian areas. A number of authors have outlined the model whereby trampling and loss of stabilizing vegetation due to grazing in riparian areas results in higher peak water flows, channel scouring, erosion and down-cutting, which in turn lowers water tables, ends permanent stream flows and dries out watersheds (Kovalchik and Elmore 1992, USBLM 1994, Trimble and Mendel 1995, Belsky et al. 1999)

Upland impacts

Away from the immediate vicinity of riparian areas, livestock damage native plants and the soil in which they germinate and take root.

The published results of Jones' review (2000) of 54 studies of arid grasslands throughout the West showed grazed areas averaged 80 percent more soil erosion, 24 percent less biomass, and 45 percent less biological soil crust coverage than comparable ungrazed areas.

Biological soil crusts contain algae, lichens, mosses and microbes that reduce erosion, enhance water infiltration. fix nitrogen and prevent exotic-weed germination. Other scientific studies found these valuable soil crusts are reduced significantly in areas where livestock graze (Beymer and Klopatek 1992, Brotherson, et al. 1983, Brotherson and Rushforth 1983).

CBD comments on Las Cienagas RMP/EIS page 8 of 31

Page 6-59

Letter 16, Page 9

In 1994 T.L. Fleischner reviewed 11 studies that showed livestock grazing had negative impacts on native plant communities in the West. Among the impacts cited were decreased ground cover, reduced biomass, and less species diversity.

Even regularly grazed mine tailings had less herbaceous cover than either un-grazed plots or mine tailings that were bladed and reseeded (Lash, et al. 1999).

Several studies in the Sonoita valley southeast of Tucson found vegetation more abundant and more diverse in ungrazed areas than in grazed comparison areas. Perennial grass covered 80 percent of un-grazed lands compared with 56 percent of grazed lands in one study (Bock and Bock 1991). Winter annual plants were more abundant in ungrazed areas (Kelt and Valone 1995). Plant-species diversity was reduced in grazed areas (Heske and Campbell 1991).

Perennial grasses were four times more abundant on Dutchwoman Butte in Tonto National Forest east of Phoenix, a mesa inaccessible to livestock, than in nearby lowland areas to which livestock have access (Ambos et al. 2000).

With development of more and more new watering troughs to "achieve better livestock distribution" by federal agencies, upland sites previously relatively free of livestock damage are being subjected to increasing damage, transferred from riparian areas. This damage still impacts riparian areas and water quality by increasing upland erosion and watershed flashiness.

Vegetation shifts

After livestock have eaten native plants, or altered the soil and water conditions so natives no longer can survive, the land is open to exotic weeds and to proliferation of woody species such as juniper, mesquite, manzanita and pines (Arnold 1950, Brown et al. 1997). Schiffman found in 1997 that livestock grazing left bare ground, facilitating weed invasions.

Natural cryptobiotic soil crusts inhibit weed germination, but grazing livestock break up these crusts (Kaltenecker and Wicklow-Howard 1999, Eckert et al. 1986, Mack 1989, Rosentreter 1994).

Schiffman's 1997 study found that livestock feed containing seeds of exotic weeds and other plants led to their introduction to grazed areas. Numerous studies have found higher concentrations of exotic weeds in grazed areas than on comparable ungrazed lands throughout the West (Daubenmire 1975, Stromberg and Griffen 1996, Robertson and Kennedy 1954, Goodwin, et al. 1999, Rickard 1995).

Studies have found that livestock tend to avoid eating some of the exotic weeds, giving them another advantage over native plants (Lacey 1987, Olson, et al. 1997).

Further adding to this problem are the many stock tanks that ranchers have created to attract livestock to waterless upland areas. As noted above, livestock congregate around water sources. Thus nitrogen from manure is concentrated around stock tanks, and around them soil is compacted and cryptobiotic crusts are broken up. This leaves considerable

CBD comments on Las Cienagas RMP/EIS page 9 of 31

Page 6-60

Letter 16, Page 10

amounts of defoliated, bare soil (Andrew 1988). These areas are prone to exotic-weed invasions (Richard 1995, Nash, et al. 1999).

In Sonoran desert, prickly pear cacti and creosote bushes displacing ocotillo plants and columnar cacti, such as saguaros, due to direct livestock trampling or because grazers eat shade-providing "nurse plants" (Blydenstein, et al. 1957, Abouhaidar 1992, Pierson and Turner 1998). J.E. Bowers (1997) found a similar phenomenon occurring in the Grand Canyon area.

Forest impacts

Some native bunch grasses chemically inhibit pine seedlings (Jameson 1968, Rietveld 1975), and other native grasses have competitive advantages over woody species and weedy annuals (Rummell 1951, Belsky and Blumenthal 1997). Livestock grazing on native grasses thus has allowed upper-altitude grasslands to be taken over by pinyon, juniper and other conifer species (Martin 1977, Arnold et al. 1964, Swetnam et al. 1999).

Grazing has removed the principal fuel of pre-historic and early historic native grassfires. This new regime of grassfire suppression has contributed to massive grassland loss and its replacement with chaparral and woody thickets (Hill 1917, Leopold 1924, Madany and West 1983, Arnold 1950, Covington 1992).

Direct grass losses to livestock grazing, and related losses of natural periodic grass fires that also inhibit conifer seedling survival, have allowed thickets of spindly Ponderosa pines to encroach into previously "open, park-like" forest-savannahs dominated by large pines with lush native-grass understories. These crowded conditions for pines leave the spindly trees much more susceptible to insect and mistletoe attacks. When fire comes to these unhealthy pine thickets, the resulting conflagrations are devastating – fires rage up in the canopies of the tree thickets instead of burning native grasses on forest floors (Belsky and Blumenthal 1997).

Wildlife impacts

The many impacts to riparian areas, grasslands and forests that livestock grazing has wrought have direct effects on wildlife. Grazing also can affect wildlife indirectly by causing detrimental impacts on species down the food chain. In natural ecosystems, predators are atop the food chain and serve as essential checks on herbivores. Without this regulation, herbivores can devastate vegetation communities.

Livestock grazing, however, has been so widespread in the West that it has depleted predators' key herbivore prey. Ranchers, or government agencies acting on behalf of the livestock industry, have slaughtered untold millions of predators. Federal "Wildlife Services," for decades known as "Animal Damage Control," traps, shoots or poisons vast numbers of coyotes, bobcats, wolves, mountain lions and prairie dogs to benefit livestock grazing. The agency killed 85,751 animals in 1997 alone (U.S. Wildlife Services 1997).

The ranching industry was a primary cause of the extirpation from the Southwest of wolves, jaguars, grizzly bears, beavers and Merriam's elk (Wagner 1978).

CBD comments on Las Cienagas RMP/EIS page 10 of 31

Page 6-61

Letter 16, Page 11

Scientists have identified prairie dogs as "keystone" herbivores in Western grasslands, as well as in the prairies to the east. Prairie dogs once provided food and shelter for 170 species, including Black-footed ferrets (now endangered), hawks, burrowing owls, mice and snakes. Poisoning to benefit the ranching industry and habitat degradation of livestock have reduced prairie-dog populations to 2 percent of their historic range (Baskin 1997).

Cattle negatively affect pronghorn antelope by depleting key browse species on critical wintering grounds. Cattle can exclude deer from available habitat and greatly reduce fawn survival. The presence of cattle in Montana is associated with elk densities of approximately one-half of what they are on ungrazed lands. Overall, the grazing of livestock on rangelands is to be expected to have negative impacts on wild ungulate species (Mackie, 1978; McNay, 1982). Pronghorn fawn production has jumped up in recent years after closure of the Hart Mtn Antelope Refuge in Oregon to grazing in 1991. This is despite no predator control program on the refuge.

The Jones (2000) review of 54 studies of arid grasslands in the West found rodent species' diversity averaged 22 percent lower in grazed areas than in comparable areas without livestock grazing.

One recent study found four times as many insects in ungrazed areas than in comparable areas subject to livestock grazing (Rambo and Faeth 1999).

In Sonoita Valley southeast of Tucson animals that need grass cover, such as the Bunchgrass lizard, are lost or reduced in grazed areas compared to similar areas without livestock grazing (Bock et al. 1990). Nineteen species of ground-foraging, seed-eating birds were 2.7 times more abundant in an area without grazing (Bock and Bock 1998). Reduced abundance and diversity of small reptiles, mammals and birds has a "bottom-up" impact on predators dependent upon them, such as endangered Mexican spotted owls and Cactus ferruginous pygmy owls (U.S. Fish and Wildlife Service 1995, U.S. Fish and Wildlife Service 1999).

Stock tanks for grazing livestock harbor "source populations for ... non-native fish" that are swept during heavy rainstorms into streams. These exotic fish either eat imperiled native fish or out-compete them for scarce food supplies (U.S. Fish and Wildlife Service Biological Opinion 1999, p. 263).

Livestock have behavioral effects on other wildlife. Elk and mule deer avoid cattle and the areas they have grazed, even if the bovines were in "moderate stocking" numbers (Loft 1991, McClaran 1991, McIntosh and Krausman 1981, Wallace and Krausman 1987).

Grazing and Disease

Grazing livestock also have a negative impact on ecological systems in the West in that the introduce new diseases to wildlife and humans, and exacerbate occurrences of other the introduce in t

Pronghorn antelope and bighorn sheep were found to suffer increased mortality in sheepand goat-grazed rangelands (Yoakum 1975, Goodson 1982). The myxozoan parasite of trout,

CBD comments on Las Cienagas RMP/EIS page 11 of 31

Page 6-62

Letter 16, Page 12

the cause of the often-fatal "whirling disease," is more common in degraded, warmer waters associated with livestock grazing (George Wuerthner, pers. comm.).

Infected cattle introduced brucellosis to elk and bison in the West (Meagher 1994). Cattle also carry the human gastrointestinal parasite *Cryptosporidium parvum*, common in streams around which cattle congregate and not easily killed by ordinary water-purification methods (*Cryptosporidium White Paper*, San Francisco Public Utilities Commission 1997, *Arizona Daily Star*, May 3, 1996, p. A-3).

Grazing and Imperiled Species

The negative impacts of livestock grazing on imperiled (threatened or endangered) species are numerous and severe. Flather et al. (1994, 1998) synthesized data on 667 threatened and endangered species for the years 1976 to 1994 for the Forest Service.

Flather's research identified livestock grazing as a factor in the endangerment of 15 of the 27 species then listed as threatened or endangered in the Southwest. Grazing was the top cause of species endangerment followed by Erosion, Exotic species invasions, Predation, Mining and Heavy equipment use. As of 2000 there were 90 threatened or endangered species, including 34 plants, 10 mammals, 4 invertebrates, six reptiles or amphibians, 26 fish and 9 bird species. Clearly the endangerment of fish is closely related to the drying up streams by the twin processes of pumping for agriculture, mining and housing and stream degradation by livestock. However as Chaney (1980) observed, most desert species depend on riparian areas at some point in their lives. Jaguars and large predators as well as many birds like the Southwestern Willow Flycatcher prefer to search for food along streams.

The Flather study identified the desert southwest as an imperiled species "hotspot," primarily for animals.

The U.S. Fish and Wildlife Service, the federal agency charged with protecting imperiled species, recognizes the negative impacts of livestock grazing on federally listed species. The agency's 1997 Biological Opinion on the Bureau of Land Management's Livestock Grazing Program in Safford and Tucson, made these statements about grazing:

For Pima pineapple cactus — "Adverse effects of grazing include trampling by livestock; habitat loss and degradation associated with construction of range improvements; vegetation manipulations such as chaining, prescribed fire, seeding with non-native plants and imprinting; and ... erosion, changes in vegetation communities, hydrology and microhabitats in uplands where the species occurs." — p. 74.

For Huachuca water umbel -- "Livestock grazing can affect the umbel through trampling and changes in stream hydrology and loss of stream-bank stability." - p. 98.

For Gila topminnow—"Direct effects [of livestock grazing] include trampling of and ingestion of fish eggs and larvae by cattle". "Effects of cattle grazing on watersheds include alterations of vegetation communities, increased soil erosion and runoff, decreased infiltration rates, damage to cryptobiotic crusts, and increased soil compaction... Degradation of watersheds can cause down-cutting [of stream banks], loss of perennial flow, loss of riparian vegetation, increased sodimentation, and higher peak flows in steams and rivers."—pp. 137-138.

For Southwestern willow flycatcher — "The overuse of riparian areas by livestock has been a major factor in degradation and decline of willow flycatcher habitat. Grazing in the riparian area during the growing season of willows and cottonwoods often precludes their regeneration. These trees, particularly willows, are favored by this species... When cattle grazing is reduced or eliminated, willow flycatcher numbers can rebound. Direct

CBD comments on Las Cienagas RMP/EIS page 12 of 31

Page 6-63

Letter 16, Page 13

destruction of nests, eggs, and nestlings by foraging cattle has been documented. Trampling of banks and reduction in riparian vegetation due to grazing can cause changes in channel morphology and stability that can further adversely affect riparian plant communities... Livestock tend to concentrate in riparian areas for forage, water and shade, due to the aridity of the surrounding uplands... [There is] a tendency to cause degradation of riparian areas regardless of the stocking rate." - p. 197 (emphases added).

For Cactus ferruginous pygmy owl -- "... the loss of riparian habitat to a variety of uses, including livestock grazing, is considered one of the causes contributing to the decline of the pygmy-owl... Damage to riparian areas from grazing ... can be long lasting and potentially irreversible. ... unregulated livestock grazing has been implicated as one of the primary causes of decadent age structures of trees, where stands have large old trees, but few saplings or small trees... reduced seedling establishment can result from browsing, trampling of seeds, and reduction of a stabilizing herbaceous cover. Soil compaction associated with grazing can reduce the growth rate of existing trees by decreasing water percolation and the abundance of mycorrhizae and other critical soil components." - p. 225.

BEST AVAILABLE SCIENCE

16-17

Very little of the foregoing evidence, which constitutes the best available science on grazing is referenced in the EIS, a probably violation of ESA which requires use of best available science, and NEPA which requires "scientific integrity", accuracy and high quality in assessing impacts.

GRAZED AREA WOULD INCREASE

Despite all available evidence, the proposed action would actually increase the area of 16-18 federal lands exposed to the damage of livestock grazing by establishing a new livestock grazing allotment on BLM lands in the Empire Mountains presently closed to livestock. The NCA's enabling legislation states that livestock grazing, "shall" be permitted but only in 'appropriate areas' and subject to all applicable federal land management laws and regulations in particular the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq. "FLPMA").

16-19

The EIS proposes creating 2319 acres of exclosures (not including Appleton Whittell) to "allow for comparison of conditions... in relation to grazing management" (p. 4.11). This is

We already have more than enough evidence to show that grazing at the levels proposed is injurious to ecological function, and would prevent full recovery of native wild habitats. This evidence is cited at length above. Appleton Whittel itself is a perfect example of the level of recovery that can take place if cows are removed. The EIS fails entirely to discuss this important example of what the future could look like without cows, except in the extremely limited context of the value of exclosures for comparison with grazed areas.

LESSONS OF THE APPELTON WHITTELL PRESERVE

16-20

The EIS fails to cite the much other work on Appleton Whittell contrasting this 30+ year cowfree area with adjacent grazed areas in which they report that grasses in winter on the AW were taller (4.4-fold) and had higher basal area ground cover (2.5-fold), canopy cover (2.2-fold), and reproductive canopy cover (10-fold) than in the grazed area after a drought. 19 species of ground-foraging, seed-eating birds (e.g., doves, quail, sparrows, towhees) were 2.7 times more abundant. Significant differences persisted even after a year of reduced stocking

CBD comments on Las Cienagas RMP/EIS page 13 of 31

16-17. Under the heading "Best Available Science," the CBD's letter makes reference to numerous quotes from newspaper articles, study reports or publications addressing a variety of subjects and geographical locations including global warming, insect and mistletoe attacks on Ponderosa pine, animal damage control, prairie dogs and blackfooted ferrets as keystone species in western grasslands, mortality of antelope and bighorn sheep in "sheep and goat grazed rangelands," whirling disease among trout, brucellosis among elk and bison in Yellowstone National Park, implied effect of cattle on elk populations in Montana, and nonnative fish from stock tanks invading native species in the Tonto National Forest. These references are not applicable to the EIS which concerns the Las Cienegas planning area as they address very different ecosystems or species which are not found and historically never occurred in the planning area.

> The people who collaborated to conceive the ideas used to formulate and write this management plan and EIS, include specialists and scientists from the private, state and federal sectors. Many hold graduate degrees in their particular disciplines and have many years of applied field experience. All the people who participated brought critical thinking skills into the process, and spent hundreds of hours sitting together in meetings to discuss issues, objectives and solutions, or visiting various locations throughout the planning area to examine the resources firsthand, and then reach conclusions acceptable to often widely diverged opinions and ideologies.

Letter 16, page 13 (continued)

- 16-18. See responses 2-9 and 2-10.
- 16-19. There is a need to have some lands, adjacent to the grazed lands, excluded from grazing use. These ungrazed areas are needed to compare the impacts of various grazing treatments on the ecological sites to evaluate effects from livestock management practices on the soils and plant communities. We need to observe the different responses so we can make changes in management if results are different than expected. In scientific studies control areas are needed to isolate variables in the study so that observed differences can be attributed to the causative actions.
- 16-20. We will incorporate as appropriate research studies from The Appleton-Whittell ACEC (Audubon Research Ranch) which appear applicable to the analysis. We agree that the Audubon Research Ranch is an important asset to use in our studies of the effects of grazing, as well as land management actions and uses on other portions of the Las Cienegas NCA. In fact, data derived by studies at the Research Ranch have been used, and comparisons made, on a variety of topics including the use of prescribed fire, grazing use and bird populations among others. We intend to continue working with the Research Ranch staff to develop projects and conduct studies as the opportunities arise. Not all the studies conducted at the Research Ranch have shown that livestock grazing adversely affects the environment. Where studies do show adverse effects from grazing, we hope to be able to use the results to make changes to improve management within the NCA.

Letter 16, Page 14

in response to drought on the grazed areas. Bock & Bock, (1993) also found that grass canopy cover was greatest on the ungrazed AW than on adjacent grazed sites. The tallest species showed the greatest height recovery increases in ungrazed plots.

Bouteloua dominated perennial grass cover was about 1.5 times greater on the AW while grass-feeding grasshoppers in the subfamily Gomphocerinae were 3.7 times more abundant in 1983-984. Conversely forb feeding species were more abundant on grazed sites. (Jepson & Bock. 1989)

The EIS notes the vast vegetative shift caused by livestock especially the introduced exotic Lehmann's lovegrass (p.3.13). Bock et al., (1986) report that the native grassland community of the Sonoita valley included a significantly greater variety and abundance of indigenous grasses, herbs, shrubs, grasshoppers, rodents, and birds. They noted that the impact of this exotic forage species "has been dramatic and largely negative". Although fire does knock back mesquite encroachment it does not reverse lovegrass encroachment (Bock & Bock, 1992). Although McClaran & Anable, (1992) did not find that grazing intensity correlated with spread of lovegrass, lovegrass was relatively more abundant on more heavily grazed sites on the Santa Rita Experiment Station.

Bailowitz, (1989) counted 103 species of butterflies on the AW reserve.

Strong & Bock. (1990) found that cottonwood riparian habitats in the Sonoita valley had the greatest bird species richness. Open grassland areas also has the greatest bird species richness and density in winter.

FLPMA

Per 43 USC 1712 (c) the proposed action (alt 2) as well as alt 4, would declare all BLM land an "area of critical environmental concern" which "means areas within the public lands where special management attention is required...to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources or other natural systems or processes..." 43 USC 1702 (a)

16-21

The EIS recognizes that the planning area has "Five of the rarest habitat types in the American Southwest", habitat for listed and sensitive species, proposed wild and scenic river segments and high scenic value. In contrast to the Appleton-Whittell cow-free ACEC that already exists, however the new so-called ACEC would still be subjected to livestock grazing. This undermines the meaning and purpose of an ACEC. The purpose of ACEC designation is to emphasize natural values over extractive uses.

FLPMA requires that during Plan development the BLM must "(6) consider the relative scarcity of the values involved and the availability of alternative means ... and sites for realization of those values "as well as "(7) weigh long-term benefits to the public against short-term benefits"

16-22

The EIS does not consider "relative scarcity". The EIS does not attempt anywhere to assess and weigh the long term versus short term benefits.

By allowing grazing not merely to continue but to expand onto lands not previously open to livestock the BLM has failed to consider the "relative scarcity" of the values involved.

CBD comments on Las Cienagas RMP/EIS page 14 of 31

- 16-21. See response 13-4. Under FLPMA the Bureau is required to assess the planning area for the existence of Areas of Environmental Concern (ACECs). An ACEC can be any area within the planning area that requires special management. Thus it could be a hazardous materials site, habitat for an endangered species, or a unique grassland area that requires special management to properly graze the resource. The purpose is not merely to limit extractive uses.
- The goals and objectives of this plan reflect the 16-22. desires of the Bureau and the planning participants to identify and protect the "relative scarcity" of the natural resources and associated social values on the lands in the Las Cienegas NCA. The primary purpose of the actions developed through this planning process is to protect the identified resources and values in the short term for the long term benefit of future generations. The EIS assessed and weighed how the proposed actions, developed through this process with a full range of alternative actions, might achieve the same goals. The RMP proposes desired future conditions, resource allocations, special designations, land tenure adjustments and management actions which are crafted to conserve, protect and/or enhance the NCA's resources and values while providing for compatible levels of uses.

Letter 16, page 14 (continued)

15-22. (continued)

The resource that was identified as being most scarce and at highest risk of being of being lost was the healthy semi-desert grassland biome upon which the values of the group depend. The Bureau decided that the strategy most likely to protect the greatest amount of this scarce resource was an ecosystem approach which sought a coalition of those individual and groups had a desire to protect and/or use the resource. The ranching community was an obvious participant. Although livestock grazing can have adverse impacts to grasslands, we decided that properly managed grazing, if adequately monitored, could be practiced to achieve the resource objectives stated in the plan.

Letter 16, Page 15

These words appear nowhere in the EIS and no estimation of relative scarcity is attempted anywhere.

16-23

The EIS provides no analysis of why 42.155 federal acres, representing 86% of the total of 48956 federal acres, are considered "appropriate" for livestock grazing given the environmental protection emphasis of ACEC designation as cited above and FLPMAs multiple use definition: "the combination that will best meet the present and future needs of the American people ... without permanent impairment of the productivity of the land and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output." (43 USC 1702(c)).

As already mentioned, beef production is not a relatively scarce value. According to the Rangeland Reform EIS 1994, all federal forage represents less than 2% of all cattle feed nationally. Therefore beef production on federal forage is irrelevant to the "present and future needs of the American people" and could easily be absorbed by slight increases in productivity by the many "alternative means ... and sites for realization" of beef production.

In contrast the rare and unique habitats in the LCNCA, habitats which are critical for recovery of threatened and endangered species are relatively are relatively scarce and have a relatively high value compared with beef production. Abundant scientific evidence and evidence presented in the EIS shows that livestock grazing is a uniformly negative impact on these habitats and on listed species they protect.

Rational consideration of this evidence in the light of statute would conclude that livestock grazing is therefore an incompatible use that should be promptly terminated on federal lands whereever practicable.

UTILIZATION LIMITS

16-24

Maximum forage use limits of 40% (proposed) or 60% (current) seem to make no difference to the BLM. Either level is described with the same rote formula that it will "assure that the physiological requirements of plant growth, rest and reproduction are met" (pp. 2.75, 2-101).

16-25 l

Neither level of forage utilization however is supported by scientific research. In a series of papers. Holechek et al. review all available studies finding that even for light grazing averaging 32% of current years growth failed to result in range condition recovery in 22% of studies. Grassland productivity was found to be dramatically higher in 30% forage use treatments compared with 40% (Holechek & Galt, 2000; Holechek et al., 1999a; Holechek et al., 1999b).

16-26

The EIS estimates extremely high consumption of 63-67% of available forage under the "adaptive" management regime of the proposed action (alt. 2) for BLM lands and actually less at 68-62% on state trust lands under the same management (p. 4.71). When compared with the estimated 41-45% under present management on Empire Cienaga this is deeply disturbing and inconsistent with the nominal forage use limit of 40% in the proposed action (p. 2.74). The EIS actually admits that forage use may be higher under the proposed than under the present action (p. 4.73).

CBD comments on Las Cienagas RMP/EIS page 15 of 31

16-23. See 16-18 above. The EIS does present analysis showing that livestock grazing can be conducted within the designated areas and that the resource objectives can be achieved. Under some of the alternatives special grazing management is required within certain ACEC's. In some proposals grazing is excluded as an authorized use (e.g. Nogales Spring ACEC). All such decisions are based upon the needs of the specific resource being protected, and what special management is considered necessary to protect the values of the ACEC being addressed.

As stated above, our analysis has shown that livestock grazing can be properly conducted within the planning area and that the resource objectives can be achieved. Monitoring studies conducted by the BLM during the past decade have shown that while grazing was authorized, improvement occurred among certain endangered species populations and other wildlife populations, and also in wildlife habitats. Therefore, we conclude that livestock grazing is not incompatible with the protection and enhancement of resources within the planning area.

Letter 16, page 15 (continued)

- 16-24. The utilization limit is an important component of the livestock grazing management strategy in the preferred alternative (Alternative 2). In fact, it has been changed from the 40-60% limit under current management (Alternative 1) in the Interim Grazing Management Plan to the 30-40% limit in this RMP. We made this change because our research has shown that grazing objectives are more likely to be achieved under a lower use limit.
- 16-25. The change in the use limit was based on research presented by Holechek, Rex, and Carlton in 1999. Refer to the References Section in the Draft Land Use Plan. Your statement that findings in Holechek, et.al. showed a 22 % failure in range recovery condition can be interpreted to mean that there was a 78% success rate.
- 16-26. The relationship of vegetation production, forage allocation, and animal utilization is a very complicated subject and the numbers and terminology can be confusing to readers. The tables on page 4-71all refer to Alternative 2. To correctly understand these data, compare Table 2-13 on page 2-74 (Alternative 1), Table 2-24 on page 2-104 (Alternative 2), and Table 2-29 on page 2-122 (Alternative 3). The final column indicates the percentage of the allocated forage that is consumed under that alternative at that alternative's use limit (50% in Alternative1, 35% in Alternative 2, and 35% in Alternative 3). The point being made is that the worse the year is, the greater the percentage of the allocated forage that is consumed if the stocking rate is not varied. This continues until the production is so low that the forage allocated is not enough for the livestock authorized, the allocated forage is completely consumed, and the cattle start eating the portion of the production that was reserved for such things as watershed protection, wildlife forage, and wildlife cover. In a good year vegetation is under allocated and too much forage remains standing, while in a bad year almost no vegetation remains standing unless the animals are forced to be removed. If the stocking rate is adjusted annually (Alternative 2) for the change in vegetation production, the percentage of the forage consumed should remain just under the level of forage allocated. In good years the allocated forage is not left uneaten, and in the bad years there is a still abundant vegetation remaining for the other uses.

Refer to responses 2-2 and 2-3 for an explanation of the differences in the columns in the tables. Only 50% of the vegetation production is considered in the forage allocation. To calculate the amount of forage allocated, subtract 50% of the total production and multiply it by the use limit. Figures in the last column show the percentage of the allocated forage that is actually consumed.

Letter 16, Page 16

16-27

Which is the real forage use limit-67% or 40%? Best available science and regulatory requirements suggest that proposed stocking rates would have to be cut by about 50% to reach appropriate levels of forage use.

16-28

The extreme level of forage and cover destruction proposed will have profoundly negative impacts on Mearns quail, pronghorn, deer, groundnesting and grassland dependent birds, rodents, insects and reptiles. The EIS notes that pronghorn and mule deer are declining but proposes to do nothing about it, bewailing the sorry state of affairs while continuing to allow cows to destroy their habitat and preclude recovery as science cited earlier shows (p. 4.73).

The EIS conveys the false impression that under alt 2 stocking rates can be adjusted on both BLM and State lands to deal with drought, whereas under alt 4, with BLM lands closed to grazing, the BLM is no longer capable of adjusting stocking rates to deal with drought. This is projected to result in 100% use of available forage in unfavorable years and continue to degrade the watershed (p. 2-131, 4.20).

16-29

The fact is that the BLM holds the State land leases for the bulk of state lands in the planning area (Empire Cienaga and Empirita) and subleases them to ranchers. Therefore under both scenarios the BLM is equally capable of dictating the appropriate stocking rate to sublessees. Why would it be less capable of controlling the stocking rate on its state lands leases to cope with unfavorable years under alternative 2 than alternative 4? If the sublessees are uncooperative, the BLM can turn the sublease over to another party in either case. This inconsistency appears to be another "red herring" to make the no-grazing alternative look bad compared with the proposed action.

MONITORING

16-30

The BLM has already neglected monitoring these allotments. Unfenced BLM lands not allocated to cows on the Empirita and Empire Mtns could be receiving heavy grazing use, but we are not to know as apparently grazing is not monitored there. The current utilization limits on Empire Cienaga of "40-60%" which we take to mean "60%" are not monitored (p. 4-5). How can the public therefore be asked to believe that the BLM will do any better with the elaborate monitoring plan proposed?

RESIDUAL COVER

16-31

Pronghorn antelope fawning, and grassland sparrow areas require cover but there is no guarantee this is possible at proposed levels of stocking.

16-32

The EIS states that three species of quail are found on the NCA. Research has shown that a minimum 6 inch stubble height must be maintained to allow quail to prosper (Brown 1982).

RIPARIAN

16-33

Riparian condition in the planning area has been dismal. Virtually no riparian was in proper Functioning Condition in 1993. Cienaga Ck and Empire Gulch have improved to 67 and 39% PFC largely as a result of livestock exclusion, but other areas not exclosed have not (pp. 3.24-26).

CBD comments on Las Cienagas RMP/EIS page 16 of 31

- 16-27. The limit is 40-60% in Alternative 1, and 30-40% in Alternatives 2 and 3.
- It must be acknowledged that current levels of 16-28. livestock grazing have often exceeded that compatible with maintaining optimum conditions for pronghorn, Mearn's quail, Baird's sparrow, bunchgrass lizard and other sensitive species. This would probably continue if Alternative 1 (No Action) were implemented. However Alternative 2 would implement an upper limit of 40% utilization which 16, if rigorously adhered to, will tend to maintain more suitable habitat condition for species requiring healthy stands of native grass cover. Under Alternative 2 the biological planning process would include more intensive monitoring of wildlife habitat conditions. This monitoring effort, if adequately funded, would provide feedback to the biological planning team members, who would use the information to determine whether the implemented stocking rate is correct or in need of modification. Admittedly, several cycles of stocking, monitoring, and adjustment would be required before livestock stocking rates could meet wildlife habitat needs.

Alternative 3 would operate in a manner similar to Alternative 2, except that BLM would not include

Letter 16, page 16 (continued)

16-28. (continued)

input from a biological planning team. Monitoring to determine whether BLM was meeting standards and guidelines relative to wildlife habitats and species would be implemented. Adjustments to meet these guidelines will be implemented as needed until the needs of sensitive wildlife were met.

Alternative 4 would achieve resource objectives identified on pages 2-5 through 2-10 for watershed, vegetation, riparian habitat, aquatic habitat and wildlife/fisheries on public land more rapidly than the other alternatives.

16-29. Agencies usually set an upward limit as the allowable stocking rate on a lease or permit. Generally the rancher is allowed to voluntarily reduce that number during times of drought. However, if the stocking rate is wrong or the rancher does not want to voluntarily reduce numbers, the agency must force a reduction. The rancher may choose to utilize appeal rights which are included in the forced reduction process. Under Alternative 2 the rancher would agree to abide by the recommendation of the Biological Planning Team (or RRT). To date, the Donaldsons are the only lessees who have made the commitment to the Biological Planning Process. The others are choosing on their own the numbers of livestock that they graze on their allotments up to their allowable stocking rate. Because the Bureau currently holds the grazing lease for the State Trust lands on the Empirita and the Empire-Cienega Ranch the agency can exert a certain amount of influence on the lessees of those ranches. We assume that under Alternative 4, if the BLM was not allowing livestock to graze on federal public lands under its administration, that the grazing leases for State Trust lands would be sold, giving the current lessees the first right of refusal. Then, no longer a party in the state lease agreements, the BLM would not have a voice in determination of stocking rates. In this scenario, we assume that the ranchers would stock as many animals as they wished on private lands and up to their allowable stocking rate on State Trust lands.

As stated in 16-4 above, the Bureau leases the State Trust lands in the Empire-Cienega and the Empirita Ranches.

However, other than being able to vary the numbers of animals grazing on those leased allotments annually, the BLM does not have any authority to make decisions regarding state-owned land. If the BLM closed the federal public lands on these ranches to livestock grazing, would there be any point in its continuing to lease the state lands? We do not know whether the Arizona State Land Department would allow the Bureau to continue holding the grazing leases, much less give us the authority to approve or deny a sublease proposal. The Bureau might be able to continue doing this under Alternative 4, but we doubt Congress would authorize the Bureau to manage these State Trust lands for grazing when we are not grazing our own lands. There is much speculation in this scenario.

Letter 16, page 16 (continued)

16-30. Currently on the Empirita, fences do not separate federal and state lands. But, these lands are being managed under a cooperative management plan with the National Resource Conservation Service (NRCS) and the Arizona State Land Department. Several range improvements are needed before implementation of the full livestock numbers and the rotational system. Therefore the Parsons, who are the grazing allotment lessees, have only been running 60 to 100 cattle for the last decade on a permit with an upward limit of 337 cattle. There has been little utilization and the trend is upward.

The public lands in the Empire Mountains have not been grazed since BLM issued trespass notices in 1997, and there is only one section of State Trust land being authorized for grazing use. Although we have not completed an ecological site inventory, most of the lands in 1997 were in good condition, except those immediately adjacent to the two water sources.

Although utilization monitoring has not been conducted on the four allotments in the planning area since acquired by the BLM in 1988, the agency has been monitoring other resources since that time. On the Empire-Cienega and Empirita allotments, Ecological Site Inventories have been completed in the uplands and 32 permanent monitoring sites were established where data has been collected to provide information about changes in vegetation condition. Aquatic and fisheries studies have been established and continue to provide information collected on an annual basis. Several types of riparian studies are in place. Many types of avian studies have been completed, and bat studies have been initiated. Waters have been inventoried, test wells monitored, and the watershed modeled by the University of Arizona. Overall this piece of land has been heavily studied and monitored. There is general agreement that the property is in good condition and is showing continued improvement. Once this plan has been completed and the proposed staff hired and put into place, additional monitoring on a more regular basis will be conducted.

16-31. There is no absolute guarantee that adequate grass cover will be present. However Alternative 2 establishes an upper utilization limit of 40% (moderate) for key grass species which may, if applied rigorously, allow for maintenance of adequate grass canopy cover for pronghorn fawns and grassland sparrows (except for areas within one-quarter mile of livestock watering facilities). In addition, the biological planning process, described in Alternative 2, permits adjustment of stocking levels to achieve an adequate amount of cover for wildlife species. Several cycles of grazing, monitoring and adjustment may be necessary before a stocking level is achieved that simultaneously meets the habitat requirements of sensitive wildlife species.

Letter 16, page 16 (continued)

- 16-32. Although "R. Brown is referenced in the text of the CBD's letter, we did not find this author listed in the attached bibliography. We assume that reference is being made to Brown R., 1982. Effects of Livestock Grazing on Meran's Quail in Southeastern Arizona. Journal of Range Management Vol. 35. No. 6 p. 727 732. This paper states that livestock utilization of 46% to 50% results in marginal habitat conditions for Mearn's quail. Hence the utilization limits of 40% to 60% described in Alternative 1 will probably result in sub-optimal grass cover for Mearn's quail. This also suggests that the 30% to 40% utilization limit, described in Alternative 2, will probably result in acceptable habitat conditions for the species, except for those areas within one quarter mile of livestock watering facilities. In addition, the biological planning process will allow for stocking rate adjustments to provide for the needs of sensitive wildlife species, so long as timely monitoring is conducted. BLM is currently coordinating with the Arizona Game & Fish Department in the use of a visibility obstruction board to assess quail habitat conditions. If this technique proves useful it will be incorporated into the monitoring program, in addition to monitoring now proposed for wildlife species and habitat.
- 16-33. Since establishing the exclosures the need for livestock grazing within the riparian zone has not developed, but we want to leave the possibility open if the need does arise. Grazing might be used to reduce the fuel load and prevent large wildfires in the riparian zone, or to open up some of the cienegas to create more open water for the waterfowl or fish.

Letter 16, Page 17

There is no guarantee that even the miniscule riparian exclosures proposed on Cienaga Creek will not still be grazed by cattle. There is a gaping trapdoor in the management description allowing "grazing use in riparian pastures and exclosures only to meet resource objectives" (EIS p.2-43). In the light of the overwhelming evidence showing that livestock degrade riparian habitat, what possible "resource objective" could require grazing?

16-34

The EIS admits that livestock crossings on Cienaga Ck damages riparian habitat, banks and water quality (p.4.48) but the proposal is to increase not reduce the number of crossings.

16-35

Equally disturbing is that the proposed action would allow the cattle to stay in the stream "crossing" lanes for up to 21 continuous days. This is excessivly long time for a herd of cows to cross a stream. This would allow extensive riparian grazing far beyond the purpose of a real "crossing".

16-36

Cinco Ponds would be still grazed during the summer, resulting in probable take of Chicahua leopard frog and other species of concern (p. 4.48). A riparian habitat assessment conducted in 2000 found that 33% of Cienega Creek and 61% of Empire Gulch still had not achieved proper functioning condition.

16-37

The EIS misrepresents upland impacts on wetland riparian by claiming that they would diminish (p. 4.43). How is this possible if forage utilization and area grazed are proposed to increase?

WATERSHEL

16-38

The no grazing alternative is expected to have significant benefits in riparian recovery and restoration of normal watershed function (p. 4.45). The EIS undercuts this gain by a spurious argument that degradation could worsen on adjacent state lands, as already dealt with above.

16-39

There has been no improvement in the watershed condition since 1974. In fact bare ground has increased to 28 from 17% while vegetative cover is only about 50% and static (p. 3.5).

In a site inspection by CBD staff in Oct 2001, very little grass cover was found throughout the pasture from the western entrance to ranch headquarters. There was a predominant cover of annuals such as *Macarantheara*. Taking the south road we found evidence of erosion and severe overgrazing and hedging of sacaton.

CBD comments on Las Cienagas RMP/EIS page 17 of 31

- 16-34. See response 2-5. Impacts associated with using crossing lanes along the creek do exist, but have been short term and localized. The Bureau and the grazing lessees continue to search for ways to further reduce impacts. As previously noted, we are proposing two fewer crossing lanes along Cienega Creek and plan to reduce adverse impacts by using gravel and rock to harden two of the crossings. The entire creek has now been fenced on both sides, and once alternate waters can be developed, the need for watering in the creek will be eliminated. We believe these actions and decisions represent considerable progress.
- 16-35. See response 2-6. The Bureau and the grazing lessee have been reducing the level of cattle use in the riparian zone. But, while the cows are nursing their calves prior to weaning, they must be "paired up"during the stream crossings to prevent the calves from being separated from their mothers. With the large herd, groups of cows and calves are gathered and brought up to the crossings where they can pair up. Although the cattle are not in the riparian zone for the full 21 days, the process of rounding up the groups and bringing them up to the crossings, pairing up, and then crossing, may take up to three weeks. The time actually spent in the water is much less than three weeks. We consulted about this process with the U. S. Fish and Wildlife Service for the interim grazing plan. Based upon this consultation, steps for monitoring and mitigating impacts to endangered species were developed and implemented and have been incorporated into the proposed action in this RMP.

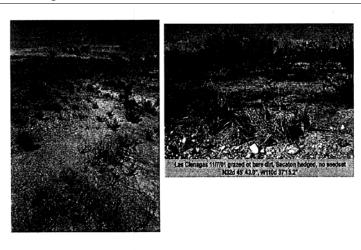
Letter 16, Page 17 (continued)

- 16-36. See response 2-8. Cienega Creek continues to progress in ecological condition. Some segments have reached PFC and are on their way to reaching their geomorphic and vegetative potential. The segments that are functional at risk are nearing PFC including the reach next to the agricultural fields adjacent to the Cienega Ranch. This reach was part of a restoration project that removed dams and reconnected the flood flows from the larger watershed to the historic channel. This has led to more recruitment of riparian vegetation and increased duration of base flows. This reach was dominated by senescing old trees that were not being replaced by young trees. Empire Gulch remains in the functional at risk category due to a head cut that may migrate upstream with large flood events in the future. This headcut was present prior to acquisition of these lands by BLM in 1988.
- 16-37. Under Alternative 2 the impacts to the upland watershed would diminish with implementation of the management actions. The intensive monitoring of the health of the upland resources and the associated Biological Planning Process would detect the need and adjust livestock numbers in time to avoid adverse impacts to upland ecological sites during times when the soils and vegetation are stressed and subject to damage (drought, wildfire, insect invasions, etc.). Reducing the adverse impacts to upland ecological sites would improve the upland watershed condition, resulting in increased infiltration of precipitation into the soil and decreased runoff, sediment transport, and soil erosion. The corresponding decrease in peak flows would reduce damage during flood events and improve wetland riparian sites.
 - Because the utilization limit remains constant at 30 to 40% of the current years production, the total quantity of forage consumed and the area grazed may increase, but the percentage of vegetation cover is not reduced. Adequate vegetation would remain to protect the soils and to assure the physiological needs of the plants. Alternative 2 provides for variable stocking rates on public lands in the planning area, based on assessment of intensive monitoring data. Livestock numbers could be increased in times of abundant vegetation production and would be reduced in years of unfavorable precipitation. The existing utilization limit (the percentage of the above ground portion of the plant harvested by livestock) would be reduced from 40-60% to 30-40%. This would tend to increase the amount of cover for watershed protection on areas being grazed.
- 16-38. The watershed condition within most of the planning area has not been assessed quantitatively. While the data referred to on page 3.5 of the Draft plan shows the watershed condition as being in satisfactory condition from 1974 to 1999, the trend (as measured by the amount of bare ground) was downward for the period 1995 through 1997. This is probably true. The last half of the 1990's was a period of very low rainfall during the summer growing season. The low vegetation production is reflected in these numbers through the lack of soil cover by live plants and litter in the 1995 and 1997 data sets. We did have a favorable year in 2001, and data collected in cooperation with the University of Arizona and the NRCS in October 2001 on 8 of the 29 permanent monitoring sites on the Empire Ranch (bare ground = 22%) may indicate an upward trend starting in 1999 (28% vs 33% in 1997) through 2001. Intensive monitoring of the resources proposed in Alternative 2 of the plan would help the Bureau to improve our assessment of watershed conditions.

Letter 16, Page 17 (continued)

16-39. We know about the areas and times mentioned in your letter and they have been addressed through the Biological planning process. Some of the problems were caused by prolonged drought. Drought and management problems combined last year to cause overuse at the south end of the ranch. The management problems are being corrected.

Letter 16, Page 18



16-40

Stock tanks are recognized as likely to cause harm to watershed condition under alt 1 (p. 4.5, 4.19), but this impact is ignored in the discussion under alt 2 which also involves new stock tank construction. (p. 2.78). The proposed opening of a new allotment in the Empire 16-41 Mtns threatens to degrade the watershed of Cienaga Ck (p. 4.13).

16-42

In the early 1990s upper Cienaga Ck had impaired water quality due to coliform, strep, ammonia and sulfides undoubtedly due to livestock which are known from much other research to be major source of water quality impairment (p. 3.8) (Nader et al., 1998 as see above). The proposed action would do little to improve water quality (p. 4.26). In fact by increasing forage use and expanding the grazed area in the Cienega Ck watershed, water quality may actually decline.

T&E SPECIES

16-43

The EIS admits that impacts to aquatic species would be slightly worse that at present by allowing more livestock crossing through Cienaga Ck. (p. 4.52). Gila topminnow numbers despite current partially excluded and recovering creek, are static (p. 3.37), Gila Chub remain rare and static in number. Chiricahua leopard frog number continue to decline. Jaguar could potentially use Cienaga Ck as a corridor.

16-44

Upland species like Lesser Long Nosed bat would still face cattle devastation of their agave foodplants because no plan is put forward to restrict cattle entry to periods outside the agave bolting season (p. 4.72). On our recent inspection high rates of flowering stalk

CBD comments on Las Cienagas RMP/EIS page 18 of 31

- 16-40. As further stated on page 4.5 the area which is currently adversely affected by the existing stock tanks is localized, small scale, and use of these waters by cattle is seasonal. Under the proposed grazing management in Alternative 2, only a few new stock tanks are proposed and these would primarily be constructed to replace the current watering areas in Cienega Creek and Empire Gulch. Also under the proposed management, cattle would only use an individual water for a period of 4 to 6 weeks in any one year.
- 16-41. See response 2-9.
- 16-42. Water quality parameters such as fecal coliform, strep and ammonia are a result of direct contact with surface water and livestock. In adjacent areas to the creek, urine and fecal matter are deposited on dry land where the ammonia enters the nutrient cycle directly through microbial and plant uptake. The coliform and Streptococcus bacteria die as dehydration progresses (EPA 1993). Sulphur in the form of hydrogen sulphide resides in the stream bed and bank soils as a natural byproduct of anaerobic decomposition. When these soils are disturbed, the hydrogen sulphide gas is liberated in the form of bubbles and diffuses into the water column.

Letter 16, Page 18 (continued)

16-42. (continued)

Because livestock have progressively been excluded from the surface waters of Cienega Creek and its tributaries over the last 13 years, inputs of fecal microbes and ammonia are likely to have diminished significantly. This impact occurs for short periods in crossing lanes when they are being used. Hydrogen sulphide does build up in soils during periods of rest from use in these areas and is released when disturbed. The Department of Environmental Quality water quality monitoring for the years 1992, 1993, 1998, 2000 and 2001 showed no exceedence of state water quality standards for any of the parameters mesured (Lin Lawson, pers. Comm, 2002).

- 16-43. It is unclear what your statement is trying to imply. Gila chub numbers decreased drastically in 1999 due to disease (external fungal infection). Until this event, Gila chub were generally abundant (common) in reaches with pool habitats. The disease epidemic in the chub population is unlikely to be either directly or indirectly related to the presence of livestock in the area. The trend in this species is very subjective as it reflects fish captured while seining for Gila topminnow. Adult chub are infrequently caught while juveniles are more susceptible to seining in pool habitats. Trend data for Gila topminnow and longfin dace is much more reliable than for chub. Fish surveys using electrofishing gear have not been a regular part of annual monitoring efforts. Leopard frogs and tadpoles are rarely encountered inside or outside of grazing exclosures. The reason(s) for their decline at Cienega Creek are unknown (Dr. Phil Rosen Univ. of AZ herpetologist). The riparian area is being used now by mountain lions which would suggest that jaguar may find prey and shelter adequate as well. See also Chapter 3: Affected Environment, Special Status Species section.
- 16-44. Some livestock graze during the season when agave are producing flower stalks and a portion of these stalks will be eaten by livestock. On the Empire/Cienega allotment attempts have been made, with some measure of success, to keep the bulk of the mother cow herd in sacaton pastures, away from agave stands during the bolt period. At present there is no clear consensus among researchers as to the impact of ungulates on agave flowering success and lesser long-nosed bat. Cattle, horses, pronghorn, deer, and javelina are known to feed on agave stalks in their early stage. Monitoring the impacts to agave stalks from cattle grazing will continue as will adhering rigorously to moderate utilization limits (40% on key species), as proposed in Alternative 2.

Letter 16, Page 19

destruction were observed for agaves in the uplands to the west of south road (EC900) north of the highway junction. At the high proposed utilization rates of up to 67% of available forage there is likely to be significant losses of the prey base for Aplomado Falcon and other sensitive or listed raptors.

16-45

The EIS admits that "Under alternative 2 the likelihood of achieving the wildlife objectives would still be doubtful" (p. 4.75), while "the removal of livestock from public lands and the elimination of grazing conflicts might allow for more successful recovery and resestablishment of species" (p. 4.82)

Then why on earth is this dismal scenario alt 2, the proposed action?

16-46

How is alt 2 supposed to be consistent with the ACEC and "Conservation" designation of the NCA and the ESA's prescription to work toward recovery of listed species? Apart from narrow strips of riparian subjected to 21 days of cows in 8 livestock crossings, the rest of the entire basin will be as cow-damaged as it has been in the past, if not more so, under the proposed action.

SW Willow Flycatcher (SWWF)

16-47

The birdlist for the NCA shows not surprisingly that birds favored by livestock presence like meadowlarks and parasitic cowbirds are "common" while birds negatively impacted by grazing and by cowbird parasitism like the Southwestern Willow Flycatcher and Bell's vireo are rare or uncommon.

16-48

Despite this evidence, cattle would still not be excluded from SWWF habitat during the breeding season. Cattle would be allowed to wander around these 6 existing and 2 new proposed "crossing" areas during breeding season of Apr- Sept (p. 2.107) in violation of the 5 mile limit for occupied habitat, which is watered down in this EIS to encompass only "livestock management facilities" (p. 2.107). The proposed action would place stock tanks less than 5 miles from riparian areas providing potential reservoirs for weeds and aquatic pests, while also attracting cattle and cowbirds (p. 4.49).

Non breeding SWWF have been found along Cienaga creek but none have been detected in surveys since 1993 although riparian habitat is suitable. A likely cause stopping the establishment of a breeding population is the cowbird population. It is cows that attract cowbirds, not only "livestock management facilities" No cows on federal lands should be within 5 miles of a nesting flycatcher or suitable habitat without a cowbird trapping scheme.

ARCHEOLOGICAL RESOURCES

16-49

Ongoing grazing significantly impacts archeological resources as research shows (Osborn et al., 1987). The proposed action is to build exclosures around sites as they are identified. A better approach not identified in the EIS is to first identify all sites and decide whether any livestock grazing is consistent with their protection in the light of available science.

RECREATION

The EIS admits the conflict between grazing and recreational demand, indicating that recreation may increase if grazing were ended on BLM lands (p. 4.109). However recreation

CBD comments on Las Cienagas RMP/EIS page 19 of 31

- 16-45. Achieving the resource objectives identified on pages 2-5 through 2-10 for watershed, vegetation, riparian habitat, aquatic habitat and wildlife/fisheries on public land will be faster under Alternative 4 than under the other alternatives. However, if adequate monitoring is conducted to identify and rectify conflicts between wildlife/fisheries requirements and other uses, and if the biological planning team makes adjustments in use levels to alleviate these conflicts, as proposed under Alternative 2, then some wildlife/fisheries objectives will be achieved more rapidly.
- The designation of the Las Cienegas NCA and the proposed ACEC designations are made to protect the sensitive resources and associated values located around Sonoita. The combination of allowable uses administered under the special management prescriptions developed in the proposed action and ACEC proposals was assessed in the EIS and was determined to be the alternative best suited to achieve the goals and objectives developed through the Bureau's Land Use Planning Process. While adverse impacts of livestock and other allowable uses were identified, adequate use supervision, monitoring, and plan revision are provided in the plan to mitigate the impacts. An example is the need to provide areas of nonuse along the riparian corridors (as well as other constraints in the ACEC prescriptions).

Letter 16, Page 19 (continued)

16-46. (continued)

The plan also provides proposals for reintroduction of threatened and endangered species and other actions to support recovery efforts for listed species, control of exotic plant species, and vegetation treatments designed to protect and restore natural ecosystem components and processes that have been disrupted through some of the past management practices. Under Alternative 2 an upper limit of 40% for key species is proposed. If this use limit is rigorously adhered to then upland areas and riparian habitats may recover from past heavy utilization and provide sufficient cover for sensitive wildlife species in most areas. However it may take several cycles of stocking, monitoring, and adjustment to resolve many major conflicts between wildlife/fisheries and other uses.

- 16-47. It is true that avian generalists such as meadow larks and cowbirds outnumber rarer riparian specialists such as Bell's Vireo, Southwestern willow flycatcher, western wood peewee, etc. in the region as a whole as well as the NCA.
- 16-48. Recently an active willow flycatcher nest territory was located on Cienega Creek. More intensive monitoring of Southwestern willow flycatcher nesting success, cowbird populations, and parasitism rates will be necessary. Additional management actions may also be necessary to reduce conflict between livestock and riparian obligate species such willow flycatcher and Bell's Vireo.
- 16-49. Osborn, et al., states that livestock can impact archaeological sites, a fact recognized by the BLM for many years. This is the reason that a large number of the planning area's cultural sites are already located within fenced exclosures, where they are not being disturbed by livestock, and why provisions for constructing exclosures in the future are being made. Currently, Class I cultural resource inventories are required, and are being conducted, before renewal of all grazing allotments within the planning area. Class III cultural resource inventories are being conducted prior to permitting any activities which might cause impacts to cultural resources, such as construction of fences, watering tanks and other allotment improvements. Additionally, this EIS requires developing and implementing a monitoring/protection plan for the cultural resources located in the NCA. The Arizona State Historic Preservation Officer (SHPO) has reviewed this EIS and concurs with the cultural resource management process proposed in Alternative 2 (See 5-1).

Letter 16, Page 20

16-50

requires management to avoid any adverse impacts that might arise as a result. Converting many of the roads into trails and siting all facilities away from wildlife conflict areas would achieve this goal. Equestrian demand is already a very small component of use and would only increase if the BLM encouraged it. The solution is not to encourage it by removing livestock facilities from areas closed to livestock, under alt 4 or the restoration alternative presented above. The EIS reads as if this were out of the BLM's hands (p. 4.109).

SOCIAL IMPACT

16-51

Poor consideration is given in the EIS to the "lifestyle and culture" interests of the numerous picnickers, day trippers, hikers, hunters, fishers, and professional or amateur mycologists, ornithologists, entomologists, herpetologists, botanists, mammalogists and other zoologists, wilderness lovers and bird watchers that frequent and enjoy the biodiversity and landscape of the NCA, including many of the Center's 6000+ members. The public interest in the NCA goes well beyond just the interest in recreation encompassing interest in threatened and endangered species, game and ecological integrity at the landscape level.

ECONOMIC ANALYSIS

No cost benefit analysis is done to see if net public benefit would exceed cost for the alternatives. The EIS details the projected loss to permittee, the minor loss of the grazing fees and cost of fencing under alt 4. but does not do an equivalent calculation of the fiscal and intangible benefits that would flow from ending grazing on public lands.

There was no consideration of the economic benefits of ending grazing for the local and regional economies that could result from recovery of wildlife and vegetation at a scale approaching the whole ecosystem, enhancing recreational, fishing and hunting resources, and cessation of ongoing costs to the taxpayer of litigation and complex grazing management schemes. Instead every opportunity is taken throughout the EIS to paint the no grazing alternative as a disaster resulting in increased degradation on State Lands and rampant subdivision.

16-52

Studies such as that of Souder (1997) were not done or referenced. Souder's study found that dispersed recreation and hunting brought in 167 times more revenue to local and regional economies than did public lands ranching on the western side of the Kaibab Plateau. His data also suggested that there was unsatisfied demand for those services which was inhibited by ranching.

In considering costs to the public, no consideration was given to predator control; direct payments, tax breaks and subsidies to ranchers; total federal costs for surveys, analysis, planning and implementation; federally funded range research and extension services.

It is assumed without evidence that loss of the permit would be economically devastating for the permittee. In fact the Federal government has a plethora of rural development grants which economically disadvantaged people in rural areas have access to. The BLM should be helping rural communities escape dependence on dying industries by tapping into these funding sources. There is good reason to expect that a permittee could benefit economically by leaving the unprofitable ranching industry and seeking other means of income with such assistance grants.

CBD comments on Las Cienagas RMP/EIS page 20 of 31

- 16-50. Equestrian demand may increase if BLM encourages horse back riding from a state or national level. The intent of this plan is not to promote any use that exceeds desired conditions set forth in this document.
- 16-51. See response 1-3. The Recreation Management Information System (RIMS) list, which acknowledges nature study as a valid recreation use, was added to Appendix 2. To facilitate simplicity throughout the planning process, we listed only major recreation activities that would occur, such as hiking. It would be unreasonable to specifically list every activity associated with the "lifestyle and cultural interests" of each individual who visits the NCA to study plants, birds, wildlife and reptiles, or "day trip," picnic, hike and hunt. We realize that everyone has their own reasons and benefits for visiting public lands. However, people who enjoy nature study and research may also unknowingly contribute to negative, cumulative impacts in degrees more or less than any other recreation users. Subtle impacts such as trampling vegetation, and disturbing wildlife lead to cumulative impacts. Our goal is to encourage in-depth knowledge and use of Leave No Trace land use ethics as a standard and enduring component of the management of recreation use.

Letter 16, Page 20 (continued)

16-52. The level of economic analysis in the FEIS is consistent with the types of issues being addressed and the decisions to be made in the RMP. Rather than being driven by an economic analysis, instead it is imperative that we approach our planning efforts from a resource based perspective. The planning decisions described in the various alternatives are developed by analyzing the impacts of various uses on the natural and cultural resources within the planning boundary. The alternatives described in the plan will allow for the continuation of actions, such as grazing and recreation, in a manner that does not have a significant impact on the natural and cultural resources and which complies with our obligations under the endangered species act.

In most cases the role of BLM in determining use allocations and analyzing various multiple use applications is to determine if the action is allowable according to the various laws, regulations, and policy. Usually this is done through an environmental analysis as authorized by the National Environmental Policy Act. We do incorporate some economic analysis into our decisions to determine whether the Bureau's actions will or will not negatively impact that portion of the population that has low income. Many factors influence the economic viability of various multiple use actions including grazing, recreation, rights of ways, etc., however over emphasis on an economic criteria to determine what is in the best interest of the public could potentially lead to various user groups competing against each other for control of strategic areas and result in degradation of resources. It is imperative that we approach our planning efforts from a resource based perspective. The planning decisions described in the various alternatives are developed by analyzing the impacts of various uses on the natural and cultural resources within the planning boundary. The alternatives described in the plan will allow for the continuation of actions, such as grazing and recreation, in a manner that does not have a significant impact on the natural and cultural resources and comply with our obligations under the endangered species act.

In most cases the role of BLM in determining use allocations and analyzing various multiple use applications is to determine if the action is allowable, according to the various laws, regulations, and policy, usually this is done through an environmental analysis as authorized by the National Environmental Policy Act. We do incorporate some economic analysis into our decisions to determine wether the Bureaus actions will or will not negatively impact that portion of the population that has low income. Many factors influence the economic viability of various multiple use actions including grazing, recreation, rights of ways, etc., however over emphasis on an economic criteria to determine what is in the best interest of the public could potentially lead to various user groups competing against each other for control of strategic areas and result in degradation of resources.

Letter 16, Page 21

16-53

No discussion of tax revenues to the County is done. If permittees continued to run livestock, despite losing the permit, property taxes paid to the County would remain unchanged. However, if permittees decided to leave the livestock business, much higher property tax rates would have to be paid to the County because of the state tax structures that tax livestock operations at 20 to 100 times less than conservation or other uses of land. Therefore there is potential for increased tax base for the County if livestock grazing were ended not only on the allotment but also on the base property. This possibility should have been considered in the economic analysis.

16-54

The estimation of \$550,000 dollars for fencing under alt 4 is a result of the unreasonable construction of this alternative. Minor additions to existing fencing could exclude most of the BLM lands from livestock and still leave state lands open to grazing. Since the BLM holds state lands leases on the Empire, Cienaga and Empirita allotments, the BLM could still control grazing management there is much the same way as detailed in alt 2, indeed hopefully better than the plan as described by reducing allowable forage use to 30% or less.

ROADS

16-55

The enabling Act required that "provisions designed to ensure that if a road or trail located on public lands within the Conservation Area, or any portion of such a road or trail, is removed, consideration shall be given to providing similar alternative access to the portion of the Conservation Area serviced by such removed road or trail." (6(b) (10)) Hiking trails closed to motorized vehicles would still provide "alternative access" to a roadway. There would also have to be identification of the portions of the NCA "serviced" by roads that are removed so as to know how to provide alternative access.

Wild and Scenic Rivers Act sect 2(b) defines:

- "(1) Wild river areas Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.
- (2) Scenic river areas -- Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads."

16-56

For Cienaga Ck to be protected for this purpose, more road closures will have to take place. The road closures proposed are minimal, in every alternative, and leave a tangle of roadways especially along Cienaga Creek. Many roads that are of questionable utility for access as they duplicate access that already exists to the same end points. Alt. 2 actually proposes to create a new route that clearly duplicates an existing route to the same destination.

16-57

An alternative road system for the Planning Area would provide well-distributed motorized access to all parts of the Area, while reducing roads near Cienaga Creek to just a few crossings. 60-70% of roads should be closed or reduced to non-motorized access trails. This would be consistent with the enabling Act's requirement to maintain "alternative" access.

CBD comments on Las Cienagas RMP/EIS page 21 of 31

- 16-53. An economic analysis of the forseeable tax revenues can only be analyzed in the most general terms and a number of scenarios would have to be generated. The tax revenues for the county could decrease or increase depending upon the development of private and state lands or acquisition of additional lands by BLM.
- 16-54. Estimates of fencing costs are only general statements because the final configuration of fences, future construction costs and methods are unknown. Text regarding fencing of public lands under Alternative 4 has been modified in Chapters 2 and 4 to note the variety of fencing options possible.
- 16-55. In the preferred alternative there are seven road segments that are to be closed to motorized vehicles and opened to non-motorized travel year-round see map 2-6.
- 16-56. Many hours of discussion about roads took place during the SVPP meetings. Ample opportunity was provided for input and modifications regarding the transportation system. In the Preferred Alternative, SVPP recommended closure and rehabilitation of about twenty road segments that vary in length from several hundred feet to some more than one milelong. Not only will these segments be closed to motorized travel, but to ensure that rehabilitation is successful any repetitive use will be discouraged.

Letter 16, Page 21 (continued)

16-56. (continued)

Refer to m Map 2-6 for an overview. The purpose of some of the new road proposals is to reduce impacts. Road closure proposals would only apply to BLM administered lands. Route designation for roads across intermixed State lands are shown as recommendations only, and would be designations that BLM would apply if the Bureau acquired the parcels.

16-57. The roads to be closed under Alternative 4 would be rehabilitated or restored and not managed for alternative non-motorized access. Dispersed hiking or horseback use would be allowed in the area, but to achieve successful rehabilitation of old road beds, the BLM would discourage their use. Use of non-motorized routes in other areas would be encouraged rather than cross country travel in the areas where rehabilitation is to occur. This would be consistent with the enabling Act's requirement to maintain "alternative" access.

Letter 16, Page 22

The EIS documents (p. 3-57) that the over 90% of visits are for low impact recreation or touring and sightseeing on the main roads. Four wheel ATV and motorbike users amount to a tiny 4% of users and there is no major demand for the huge network or roads that presently exists.

UTILITY CORRIDORS

16-58

The proposed conversion of existing power and gas corridors into "double-wide" corridors subverts the underlying purpose of the NCA. The land acquisitions and NCA designation were originally intended to forestall urbanization of the Sonoita Valley.

Safe population size using the Sonoita Basin aquifer is estimated in the EIS to be 2767 people, while predicted population would exceed this by threefold (p. 3.7). By allowing expanded utility access for services into the Sonoita area, the proposed action will be facilitating urban development and ultimately the drying out of Cienaga Ck.

Allowing more utility development will entail new roads and heavy equipment access, which will cause erosion and siltation of creeks as noted in the EIS (p. 4-9).

CONCLUSION

In conclusion, the CBD feels that the proposed action is possibly worse than the current situation if the EIS is accurate. No alternative is advanced that could be called: cost effective, no grazing, minimal development, or maximal for ecosystem and listed species restoration and conservation of our threatened natural heritage. We believe that the proposed action would place the BLM in violation of existing environmental protection laws.

16-59

We recommend that the draft EIS been withdrawn and reworked to advance a fifth "restoration" alternative, to be advanced as preferred by the agency and consistent with applicable law.

Sincerely,

Martin Taylor, Ph.D. Coordinator

CBD comments on Las Cienagas RMP/EIS page 22 of 31

- 16-58. Any subsequent utility expansions or new right-ofway applications will be individually analyzed for direct, indirect, and cumulative impacts.
- 16-59. Thank you for your comments.

Letter 16, Page 23

BIBLIOGRAPHY

Abouhaidar, F. 1992. Influence of livestock grazing on saguaro seedling establishment. Symposium on Research in Saguaro National Monument, Globe, Arizona 57-61.

Ambos, N., G. Robertson, and J. Douglas. 2000. Dutchwoman Butte: a relict grassland in central Arizona. Rangelands 22:3-8.

Andrew, M. H. 1988. Grazing impacts in relation to livestock watering points. Trends in Evolutionary Ecology 3:336-339.

Arnold, J. F. 1950. Changes in ponderosa pine-bunchgrass in northern Arizona resulting from pine regeneration and grazing. Journal of Forestry 48:118-126.

Arnold, J. F., D. A. Jameson, and E. H. Reid. 1964. The Pinyon-Juniper Type of Arizona: Effects of Grazing, Fire, and Tree Control. U.S. Department of Agriculture.

Bahre, C. J. 1991. A Legacy of Change: Historic Human Impact on Vegetation of the Arizona Borderlands. University of Arizona Press, Tucson.

Baskin, Y. 1997. The work of nature: how the diversity of life sustains us. Island press, Washington DC.

Belsky, A. J. 1986. Does herbivory benefit plants? A review of the evidence. The American Naturalist 127:870-892.

Belsky, J., A. Matzke, and S. Uselman. 1999. Survey of livestock influences on stream and riparian ecosystems in the western United States. Journal of Soil and Water Conservation 54:419-431.

Belsky, J., and D. M. Blumenthal. 1997. Effects of livestock grazing on stand dynamics, and soils in upland forests of the Interior West. Conservation Biology 11:315-327.

Beymer, R. J., and J. M. Klopatek. 1992. Effects of Grazing on Biological soil Crusts in Pinyon-Juniper Woodlands in Grand Canyon National Park. American Midland Naturalist 127:139-148.

Blackburn, W. H., R. W. Knight, and M. K. Wood. 1982. Impacts of grazing on watersheds: a state of knowledge. Texas Agricultural Experiment Station, Texas A&M University, College Station, Texas.

Blydenstein, J., C. R. Hungerford, G. I. Day, and R. R. Humphrey. 1957. Effect of domestic livestock exclusion on vegetation in the Sonoran Desert. Ecology 38:522-526.

Bock, C. E. & Bock, J. H. (1993). Cover of perennial grasses in southeastern Arizona in relation to livestock grazing. *Conservation Biology* **7**, 371-377.

Bock, C. E., and B. Webb. 1984. Birds as grazing indicator species in southeastern Arizona. Journal of Wildlife Management 48:1045-1049.

Bock, C. E., and J. H. Bock. 1991. Effects Of Long-Term Livestock Exclusion In A Semiarid Grassland. First Biennial Conference on Research in Colorado Plateau National Parks, Flagstaff 10:123-133.

CBD comments on Las Cienagas RMP/EIS page 23 of 31

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Letter 16, Page 24

- Bock, C. E., and J. H. Bock. 1999. Response of winter birds to drought and short-duration grazing in southeastern Arizona. Conservation Biology 13:1117-1123.
- Bock, C. E., Bock, J. H., Jepson, K. L. & Ortega, J. C. (1986). Ecological effects of planting African lovegrasses in Arizona (USA). *National Geographic Research* 2, 456-463.
- Bock, C. E., H. M. Smith, and J. H. Bock. 1990. The effect of livestock grazing upon abundance of the lizard. Sceloporus scalaris, in southeastern Arizona (USA). Journal of Herpetology 24:445-446.
- Bock, C. E., J. H. Bock, M. C. Grant, and T. R. Seastedt. 1995. Effects of fire on abundance of *Eragrostis intermedia* in a semi-arid grassland in southeastern Arizona. Journal of Vegetation Science 6:325-328.
- Bock, C. E., J. H. Bock, W. R. Kenny, and V. M. Hawthorne. 1984. Responses of birds rodents and vegetation to livestock exclosure in a semidesert grassland site. Journal of Wildlife Management 37:239-242.
- Bock, C. E., V. Saab, T. Rich, and D. Dobkin. 1992. Effects of livestock grazing on neotropical land birds in western North America. USDA General Technical Report RM
- Bock, J. H. & Bock, C. E. (1992). Vegetation responses to wildfire in native versus exotic Arizona grassland. *Journal of Vegetation Science* **3**, 439-446.
- Bowers, J. E. 1997. Demographic patterns of Ferocactus cylindraceus in relation to substate age and grazing history. Plant Ecology 133:37-48.
- Bowers, W. B., A. Hosford, A. Oakley, and C. Bond. 1979. Wildlife habitat in managed rangelands in the great basin of northeastern Oregon. USDA Forest Service.
- Brotherson, J. D., and S. R. Rushforth. 1983. Influence of Cryptogamic Crusts on Moisture Relationships of Soils in Navajo National Monument, Arizona. Great Basin Naturalist 43:73-78.
- Brotherson, J. D., S. R. Rushforth, and J. R. Johansen. 1983. Effects of Long-term Grazing on Cryptogam Crust Cover in Navajo National Monument. Arizona. Journal of Range Management 36:579-581.
- Brown, J. H., and W. McDonald. 1995. Livestock grazing and conservation on southwestern rangelands. Conservation Biology 9:1644-1647.
- Brown, J. H., T. J. Valone, and C. G. Curtin. 1997. Reorganization of an arid ecosystem in response to recent climate change. Proceedings of the National Academy of Sciences of the United States of America 94:9729-9733.
- CEQ- Council on Environmental Quality (1981) Forty Most Asked Questions Concerning CEQ's NEPA Regulations 46 Fed. Reg. 18026-27 (March 23, 1981)
- Chaney, E., W. Wilmore and W.S. Platts. 1990. Managing change: Livestock grazing on western riparian areas. Environmental Protection Agency.
- Cooperrider, A. Y. 1990. Conservation of Biological Diversity on Western Rangelands. Trans 55th N.A. Wildlife & Natural Resources Conference.

CBD comments on Las Cienagas RMP/EIS page 24 of 31

Letter 16, Page 25

Covington, W. W. 1992. Postsettlement changes in natural fire regimes: Implications for restoration of old-growth ponderosa pine forests. USDA Forest Service.

Daubenmire, R. F. 1975. Plant succession on abandoned fields, and fire influences in a steppe area in southeastern Washington. Northwest Science 49:36-48.

Eckert, R. E. J., F. F. Peterson, M. S. Meurrise, and J. L. Stevens. 1986. Effects of soilsurface morphology on emegence and survival of seedlings in big sagebrush communities. Journal of Range Management 39:414-420.

Elmore, W. & Kauffman, B. (1994). Riparian and watershed systems: degradation and restoration. In *Ecological implications of livestock herbivory in the West* (ed. M. Vavra, W. A. Laycock and R. D. Pieper), pp. 212-231. Society for range Management, Denver, CO.

Emlen, J. M. 1973. Ecology: an evolutionary approach. Addison-Wesley Pub. Co., Reading, Mass.

Flather, C. T., L. A. Joyce, and C. A. Bloomgarden. 1994. Species endangerment patterns in the United States. Pp. 42. USDA Forest Service, Ft Collins.

Flather, C. T., M. S. Knowles, and I. A. Kendall. 1998. Threatened and endangered species geography:characteristics of hotspots in the coterminous United States. Bioscience 48:365-276.

Fleischner, T. L. 1994. Ecological costs of livestock grazing in western North America. Conservation Biology 8:629-644.

Gifford, G. F., and R.H. Hawkins. 1976. Grazing systems and watershed management: a look at the record. Journal of Soil and Water Conservation 31:281-283.

Clinski, R. 1977. Regeneration and distribution of sycamore and cottonwood trees along Sonoita Creek, Santa Cruz County, Arizona. USDA Forest Service Technical Report RM-43. [NA]

Goguen, C. B., and N. E. Mathews. 2000. Local gradients of cowbird abundance and parasitism relative to livestock grazing in a western landscape. Conservation Biology 14:1862-1869.

Goodson, M. 1982. Effects of domestic sheep grazing on bighorn sheep populations. Third Sheep and Goat Biannual Symposium Proceedings, 287-313.

Goodwin, J. R., P. S. Doescher, L. E. Eddleman, and D. B. Zobel. 1999. Persistence of Idaho fescue on degraded sagebrush steppe. Journal of Range Management 52:187-198.

Harris, J. H. 1991. Effects of brood parasitism by brown-headed cowbirds on willow flycatcher nesting success along the Kern River, California. Western Birds 22:13-26.

Heske, E. J., and M. Campbell. 1991. Effects of an 11-year livestock exclosure on rodent and ant numbers in the Chihuahuan Desert, southeastern Arizona (USA). Southwestern Naturalist 36:89-93.

Hill, R. R. 1917. Effects of grazing upon western yellow pine reproduction in the National Forests of Arizona and New Mexico. USDA Bulletin 580.

CBD comments on Las Cienagas RMP/EIS page 25 of 31

Page 6-88

Letter 16, Page 26

- Holechek, J. L. 1988. An approach for setting the stocking rate. Rangelands 10:10-14.
- Holechek, J. L. & Galt, D. (2000). Grazing Intensity Guidelines. Rangelands 22, 11-14.
- Holechek, J. L., H. Gomes, F. Molinar, and D. Galt. 1999. Grazing studies: what we've learned. Rangelands 21:12-16.
- Holechek, J. L., H. Gomes, F. Molinar, D. Galt, and R. Valdez. 2000. Short-Duration Grazing: The Facts in 1999. Rangelands 22:18-22.
- Holechek, J. L., R. D. Pieper, and C. H. Herbel. 1998. Range Management: Principles and practices. Prentice Hall, Upper Saddle river, New Jersey.
- Holechek, J. L., Thomas, M., Molinar, F. & Galt, D. (1999b). Stocking Desert Rangelands: What We've Learned. *Rangelands* 21, 8-12.
 - Jacobs, L. 1992. Waste of the west: public lands ranching. Lynn Jacobs, Tucson.
- Jameson, D. A. 1968. Species interactions of growth inhibitors in native plants of northern Arizona. USDA Forest Service.
- Jepson, I. K. & Bock, C. E. (1989). Response of grasshoppers (Orthoptera: Acrididae) to livestock grazing in southeastern Arizona (USA). *Oecologia* 78, 430-431.
- Johnson, W. M. 1956. The effect of grazing intensity on plant composition, vigor, and growth of pine-bunchgrass ranges in central Colorado. Ecology 37:790-798.
- Jones, A. 2000. Effects of cattle grazing on North American arid ecosystems: a quantitative review. Western North American Naturalist 60:155-164.
- Kaltenecker, J. H., and M. C. Wicklow-Howard. 1999. Biological soil crusts: natural barriers to *Bromus tectorum* L. establishment in the northern Great Basin USA. VIth International Rangeland Congress- Proceedings, Townsville 109-111.
- Kauffman, J. B., and W. C. Krueger. 1984. Livestock impacts on riparian ecosystems and streamside management implications...a review. Journal of Range Management 37:430-438.
- Kelt, D. A., and T. J. Valone. 1995. Effects of grazing on the abundance and diversity of annual plants in Chihuahuan desert scrub habitat. Oecologia Berlin 103:191-195.
- Kovalchik, B. L., and W. Elmore. 1992. Effects of cattle grazing systems on willow dominated plant associations in central Oregon. Proceedings- Symposium on ecology and management of riparian shrub communities, 111-119.
- Krueper, D. J. 1993. Effects of land use practices on Western riparian ecosystems $\it in$ D. M. Finch and S. P.W., eds. Status and management of neotropical migratory birds. US Forest Service, General Technical report RM-229, Ft Collins, CO.
- Lacey, J. R. 1987. The influence of livestock grazing on weed establishment and spread. Proceedings Montana Academy of Science 47:131-146.

CBD comments on Las Cienagas RMP/EIS page 26 of 31

Page 6-89

Letter 16, Page 27

- Lash, D. W., E. P. Glenn, W. J. Waugh, and D. J. Baumgartner. 1999. Effects of grazing exclusion and reseeding on a former uranium mill site in the Great Basin desert, Arizona. Arid Soil Research and Rehabilitation. July Sept 13:3.
- Leopold, A. 1924. Grass, brush, timber and fire in southern Arizona. Journal of Forestry 22:1-10.
- Lesley, L. B. 1929. Uncle Sam's camels, the Journal of May Humphreys Stacey supplemented by the report of Edward Fitzgerald Beale (1857-1858). Harvard University Press, Cambridge, MA.
- Loft, E. R., J.W. Menke, and J.G. Kie. 1991. Habitat shifts by mule deer: the influence of cattle grazing. Journal of Wildlife Management 55:16-26.
- Mack, R. N. 1989. Temperate grasslands vulnerable to plant invasions: characteristics and consequences. Pp. 155-179 in J. A. Drake, H. A. Mooney, F. DiCastri, R. H. Groves, F. J. Kruger, M. Rejmanek and M. Williamson, eds. Biological invasions: a global perspective. Wiley & Sons, Chinchester, UK.
- Mack, R. N., and J. N. Thompson. 1982. Evolution in Steppe with Few Large, Hoofed Animals. The American Naturalist 119:757-772.
- Mackie, R. J. (1978). Impacts of livestock grazing on wild ungulates. In North American Wildlife and Natural Resources Conference, vol. 43. Transactions of the North American Wildlife and Natural Resources Conference, pp. 462-476.
- Madany, M. H. and N. E. West. 1983. Livestock grazing fire regime interactions within montane forests of Zion National Park, Utah. Ecology 64:661-667.
- Martin, J. W., and R. M. Turner. 1977. Vegetational change in the Sonoran Desert region, Arizona and Sonora. Journal of the Arizona Academy of Sciences
 - Martin, P. S. 1970. Pleistocene niches for alien animals. BioScience 20:218-221.
 - Mayfield, H. 1977. Brown-headed cowbird: agent of extermination? American Birds 31
- McClaran, M. P. 1991. Desert mule deer use of grazed and ungrazed habitats. J Range Manage. Denver, Colo.: Society for Range Management. Sept:487-490.
- McClaran, M. P. & Anable, M. E. (1992). Spread of introduced Lehmann lovegrass along a grazing intensity gradient. *Journal of Applied Ecology* **29**, 92-98.
- McClaran, M. P., and P. C. Sundt. 1992. Population dynamics of the rare orchid, Spiranthes delitescens. Southwest Naturalist 37:299-333.
- McIntosh, B. J., and P. R. Krausman. 1981. Elk and mule deer distributions after a cattle introduction in northern Arizona Effects of grazing, Apache-Sitgreaves National Forest. Proceedings of the Wildlife Livestock Relationships Symposium: held at Coeur d'Alene, Idaho, April 1982:545-552.
- McIntosh, B. J., and P. R. Krausman. 1982. Effects of livestock grazing on Mearns quail in southeastern Arizona. J Range Manage. Denver: Society for Range Management. Nov:727-732.

CBD comments on Las Cienagas RMP/EIS page 27 of 31

Page 6-90

Letter 16, Page 28

McNaughton, S. J. 1986. On plants and herbivores. American Naturalist 128:765-770.

McNaughton, S. J. 1993. Grasses and grazers: science and management. Ecological Applications 3:17-20.

McNay, M. E. a. B. W. O. G. (1982). Cattle-pronghorn interactions during the fawning season in northwestern Nevada. University of Idaho Forest, Wildlife and Range Experiment Station, Moscow, ID.

Meagher, M., and M. E. Meyer. 1994. On the origin of brucellosis in bison of Yellowstone National Park: A review. Conservation Biology 8:645-653.

Medina, A. L., Sepulveda, and J. Betancourt. 1988. Vegetation changes in relation to livestock exclusion and rootplowing in southeastern Arizona. Southwest Nat. Austin, Tex.: Southwestern Association of Naturalists. Nov 23:425-436.

Nader, G. A., Tate, K. W., Atwill, E. R. & Bushnell, J. (1998). Water quality effects of rangeland beef cattle excrement. *Rangelands* 20, 19-25.

Nash, M. S., W. G. Whitford, A. G. de Soyza, J. W. van Zee, and K. M. Havstad. 1999. Livestock activity and Chihuahan desert annual plant communities: boundary analysis of disturbance gradients. Ecological Applications 9:814-823.

Ohmart, R. D. 1994. The effects of human-induced changes on the avifauna of western riparian habitats. Studies in Avian Biology 15:273-285.

Ohmart, R. D. 1996. Historical and present impacts of livstock grazing on fish and wildlife resources in western riparian habitats. Pp. 245-279 in P. R. Krausman, ed. Rangeland wildlife. Society for Range management, Denver.

Ohmart, R. D., and B. W. Anderson. 1982. North American desert riparian ecosystems. Greenwood Press, Westport, CN.

Olson, B. E., R. T. Wallander, and J. R. Lacey. 1997. Effects of sheep grazing on a spotted knapweed-infested Idaho fescue community. Journal of Range Management 50:386-

Osborn, A., Vetter, S., Hartley, R., Walsh, L. & Brown, J. (1987). Impacts of Domestic Livestock Grazing on the Archeological Resources of Capitol Reef National Park, Utah, pp. 1-136. Midwest Archeological Center Occasional Studies in Anthropology.

Pieper, R. D. 1994. Ecological implications of livestock grazing. Pp. 177-211 in M. Vavra, W. A. Laycock and R. D. Pieper, eds. Ecological implications of livestock herbivory in the West. Soc. for Range Management, Denver.

Pierson, E. A., and R. M. Turner. 1998. An 85-year study of saguaro (Carnegiea gigantea) demography. Ecology Washington D C. Dec. 79:2676-2693.

Rambo, J. L., and S. H. Faeth. 1999. Effect of vertebrate grazing on plant and insect community structure. Conservation-Biology. Oct., 1999; 13:1047-1054.

Rickard, W. H. 1995. Experimental cattle grazing in a relatively undisturbed shrubsteppe community. Northwest Science 59:66-72.

CBD comments on Las Cienagas RMP/EIS page 28 of 31

Letter 16, Page 29

Rietveld, W. J. 1975. Phytotoxic grass residues reduce germination and initial root growth of ponderosa pine. USDA Forest Service.

Rinne, J. N. 1985. Above-ground biomass quantities and livestock production at big sacaton riparian areas in southeastern Arizona. Gen Tech Rep RM Rocky Mt For Range Exp Stn U S For Serv. Fort Collins, Colo. : The Station 120:305-309.

Rinne, J. N., and T. Tharlson. 1986. Effects of Domestic Livestock Grazing on Montane Streams: Aquatic Macroinvertebrates. GREAT BASIN NATURALIST 48:146-153.

Robertson, J. H., and P. B. Kennedy. 1954. Half-century changes on northern Nevada ranges. Journal of Range Management 7:117-121.

Rood, S. B., and J. M. Mahoney. 1990. Collapse of riparian poplar forest downstream from dams in western prairies: probable causes and prospects for mitigation. Environmental Management 14:451-464.

Rosentreter, R. 1994. Displacement of rare plants by exotic grasses. Pp. 170-175 in S. B. Monsen and S. G. Kitchen, eds. Ecology and management of of annual rangelands-proceedings. USDA Forest Service, Ogden UT.

Rummell, R. S. 1951. Some effects livestock grazing on ponderosa pine forest and range in central Washington. Ecology 32:594-607.

Savory, A., and J. Butterfield. 1999. Holistic management: a new framework for decision making. Island Press, Washington, D.C.

Schiffman, P. M. 1997. Animal mediated dispersal and disturbance: drivig forces behind alien plant naturalization. Pp. 87-94 in J. O. Luken and J. W. Thieret, eds. Assessment and management of plant invasions. Springer- Verlag, New York.

Sharp, A. L., J.J. Bond, J.W. Neuberanger, A.R. Kuhlman, and J.K. Lewis. 1964. Runoff and additional states of the state o

Skovlin, J. M. 1984. Impacts of grazing on wetlands and riparian habitat: A review of our knowledge. National Research Council/National Academy of Sciences. Westview Press, Boulder, CO.

Smeins, F. E. 1975. Effects of livestock grazing on runoff and erosion . Proceedings of the Watershed Management Symposium., American Society of Civil Engieers, New York, NY.

Smith, R. J. 1977. Conclusions. Pp. 117-118 *in* J. E. Townsend and R. J. Smith, eds. <u>Proceedings of a seminar on improving fish and wildlife benefits in range management.</u> USDI Fish & Wildlife Service Biological Services Program, Washington, D.C.

Southwest Regional Assessment Group, U. G. C. R. P. (2000). Preparing for a changing climate. The potential consequences of climate variability and change: Southwest., pp. 60. Institute for the Study of Planet Earth, University of Arizona., Tucson. Arizona.

CBD comments on Las Cienagas RMP/EIS page 29 of 31

D I .. C:----- DMD/EIC ---- 20 -F 21

Letter 16, Page 30

Stromberg, M. R., and J. R. Griffen. 1996. Long-term patterns in coastal California grasslands in relation to cultivation, gohers, and grazing. Ecological Applications 6:1189-1211

Strong, T. R. & Bock, C. E. (1990). Bird species distribution patterns in riparian habitats in southeastern Arizona (USA). *Condor* **92**, 866-885.

Swetnam, T. W., C. D. Allen, and J. B. Betancourt. 1999. Applied historical ecology: using the past to manage the future. Ecological Applications 9:1189-1206.

Szaro, R. C. and C. P. Pase. 1983. Short-term changes in a cottonwood-ash-willow association on a grazed and an ungrazed portion of Little Ash Creek in central Arizona. Journal of Range Management 36:382-384.

Tausch, R. J., J. C. Chambers, R. R. Blank, and R. S. Nowak. 1994. Differential establishment of perennial grass and cheatgrass following fire on an ungrazed sagebrushjuniper site. Wildland shrub and arid land restoration symposium, Las Vegas INT-GTR-315

Trimble, S. W., and A. C. Mendel. 1995. The cow as a geomorphic agent, a critical review. Geomorphology 13:233-253.

U.S. Wildlife Services 1997. Report.

US Bureau of Land Management. 1994. Rangeland Reform '94. Final Environmental Impact Statement. US Bureau of Land Management.

US Fish and Wildlife Service. 1994. Sonoran Pronghorn Recovery Plan Revision. US Fish and Wildlife Service.

US Fish and Wildlife Service. 1995. Mexican Spotted Owl Recovery Plan. US Department of Interior, Albuquerque, NM.

US Fish and Wildlife Service. 1997. Programmatic Biological Opinion for the Safford/Tucson BLM Field Offices' Livestock Grazing Program, Southeastern Arizona.

US Fish and Wildlife Service. 1999. Biological Opinion: On-going and long-term grazing on the Coronado National Forest. Pp. 376. U.S. Fish and Wildlife Service, Phoenix, Arizona.

US Forest Service 1998. Guidance Criteria for determining the effects of issuing term grazing permits on threatened, endangered, or species proposed for listing, Region 3. Pp. 56. US Forest Service, Albuquerque, NM.

US General Accounting Office 1991a. Rangeland Management Forest Service Not Performing Needed Monitoring of Grazing Allotments. Pp. 8. GAO, Washington D.C.

US General Accounting Office 1991b. Rangeland Management: Bureau of Land Management's Hot Desert Program Merits Reconsideration. U.S. General Accounting Office

US General Accounting Office 1993a. Rangeland Management: BLM's Range Improvement Project Database is Incomplete and Inaccurate. U.S. General Accounting Office, Washington D.C.

CBD comments on Las Cienagas RMP/EIS page 30 of 31

Letter 16, Page 31

US General Accounting Office 1993b. Rangeland Management: Profile of the Forest Service's Grazing Allotments and Permittees. U.S. General Accounting Office, GAO/RCED-93-141FS., Washington D.C.

Wagner, F. H. 1978. Livestock grazing and the livestock industry. Council on Environmental Quality, US Government Printing Office, Washington, D.C. [NA].

Wallace, M. C., and P. R. Krausman. 1987. Elk, mule deer, and cattle habitat in central Arizona. Journal of Range Management 40:80-83.

Waser, N. M., and M. V. Price. 1981. Effects of grazing by cattle on diversity of annual plants in the Sonoran Desert Arizona. Oecologia. Berlin, Springer International 50:407-411.

Westoby, M., B. Walker, and I. Noy-Meir. 1989. Opportunistic management for rangelands not at equilibrium. Journal of Range management 42:266-275.

Yoakum, J. D. 1975. Antelope and livestock on rangelands. Journal of Animal Science 40:985-993. Bailowitz, R. A. (1989). Census of the butterflies of the National Audubon Society's Appleton-Whittel Research Ranch, Elgin, Arizona (USA). *Journal Of Research On The Lepidoptera* 27, 120-128.

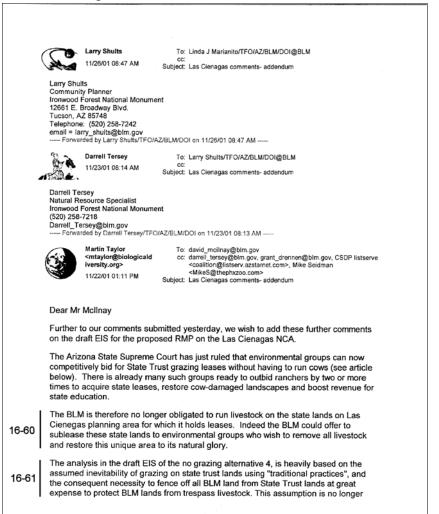
Yool, S. R. (1999). Multi-scale analysis of disturbance regimes in the northern Chihuahuan Desert. *Journal of Arid Environments*. **40**, 467-483.

CBD comments on Las Cienagas RMP/EIS page 31 of 31

Page 6-94

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Letter 16, Page 32



The Bureau is aware of the Arizona Supreme Court ruling involving the renewal of grazing leases on State Trust Lands. The BLM is not obligated to lease state land for livestock grazing, but does currently lease state land for this use because it facilitates the proper management of the adjacent federal lands located in the Las Cienegas National Conservation Area. The Bureau will continue this practice under the proposed action as long as it is appropriate and it is determined to achieve the land use objectives identified through our planning process. The Bureau will assess this and other court rulings, and may identify and develop alternative actions in the future should the rulings change the current legal and political environment. See also response 16-4.

If BLM chose to no longer run livestock on the State grazing leases that it holds, it is assumed that BLM would either need to relinquish the leases or apply for conservation use. BLM would presumably not be authorized to sub-lease the State lands for conservation use unless the State Land Department had already approved an application for conservation use. Since applications for conservation use, based on the very recent Arizona Supreme Court decision that you referenced, have not yet been tested, it can only be speculated what the potential outcomes might be.

Letter 16, Page 32 (continued)

16-61. Alternative 4 in the EIS is an alternative that assesses the impacts of not authorizing livestock grazing on the federal lands in the planning area. The Bureau does not administer livestock grazing on the adjacent state lands leased in the area. The no grazing alternative assesses the impacts of fencing the federal lands as an action necessary to prevent unauthorized grazing of the federal lands from any adjacent lands where livestock grazing is currently practiced. If the adjacent state or private lands did not allow grazing the proposed fencing would not be necessary to assess the no grazing alternative. The Bureau will assess the recent Arizona Supreme Court ruling as it is interpreted and implemented in the future, and may identify and develop alternative actions should the rulings change the current legal and political environment. See also responses 16-3 and 16-54.

Letter 16, Page 33

tenable. Now cattle could be readily removed from both state and BLM lands, and all fences eliminated. The prospects are astounding for recovery of the many imperiled species and game animals currently suffering from livestock ranching in the Las Cienagas area.

16-62

Consequently, the draft EIS should be completely reanalyzed in the light of this very different legal landscape and a new draft EIS issued for a public comment period with "no grazing" on all lands in the planning area as the agencies preferred alternative for endangered species, wildlife and ecological restoration. We look forward to working with all groups seeking an end to livestock grazing on the NCA, in developing this preferred alternative.

sincerely, [IMAGE]
Martin Taylor, Ph.D.
Coordinator
Grazing Reform Program
Center for Biological Diversity
PO Box 710
Tucson AZ 85702
USA

Email:- mtaylor@biologicaldiversity.org Tel:- (520) 623 5252 ext 307

Fax:- (520) 623 9797

Leasing to save grazing land OK'd

By Carol Sowers The Arizona Republic Nov. 22, 2001

Environmentalists on Wednesday won a major court victory that will allow them

to seek leases on grazing land in order to preserve it.

The decision reversed an earlier Arizona Court of Appeals ruling that said those

wishing to lease grazing land had to put livestock on it.

The Arizona Supreme Court ruled that the state Land Department was wrong

when it said that environmentalists could not apply to lease state grazing land for

conservation. Environmentalists wished to lease the land and then not put cattle

on it, thereby saving the land from what they consider the

16-62. See responses 16-15 and 16-60. Removal of livestock from BLM managed public lands is prescribed under Alternative 4 in the RMP and analyzed in the FEIS. As stated in the responses above, while the Bureau currently leases State lands for livestock grazing to facilitate the proper management of the adjacent federal lands, the Bureau does not administer the livestock use of these lands. The State Land Department would make any decisions regarding removal of livestock from State Trust lands and their decision would not be part of this RMP. However, the cumulative impacts analysis for Alternative 4 includes the possible scenario of livestock grazing ending on State Trust lands as well as on public lands. Should BLM acquire the State Trust lands in the future, it would then be in a position to make a decision about whether livestock grazing would be continued on these lands. In the interim, in order to adequately assess the alternative of not allocating forage for grazing on the federal lands in the planning area it is necessary to include an analysis of fencing the federal lands from adjacent lands where grazing is currently authorized.

Letter 16, Page 34

ravages of grazing

In the opinion, the justices said that Land Department officials "may not

summarily disregard and label restorative uses as inappropriate for grazing land."

Attorney Tim Hogan represents Forest Guardians, the environmental group that

filed the lawsuit against the Land Department. He said the Forest Guardians will

now apply for 10-year leases on 16,000 acres of grazing land in Pinal County;

162 in Santa Cruz; and 5,000 in Coconino County.

Land Department officials said they had just received the court's decision and

were not prepared to comment.

Hogan, of the non-profit Arizona Center for Law in the Public Interest, said that

allowing Forest Guardians to lease the land is a good deal for Arizona taxpayers.

He said the group is willing to pay two to five times the amount charged for

grazing. The state charges \$2 a head for livestock each year, but the group will

offer what would amount to \$4 to \$10 a head, even though the land will not be

used for grazing.

"We just want to lease overgrazed land, revegetate it and return it to its pristine

form," Hogan said.

The justices wrote they could think of no reason that the state should deny the

"arguably best bidder" simply because they want to restore the land.

If the environmental group wins the leases, cattle currently grazing on the land

would have to be relocated. But Hogan said that often ranchers move cattle from

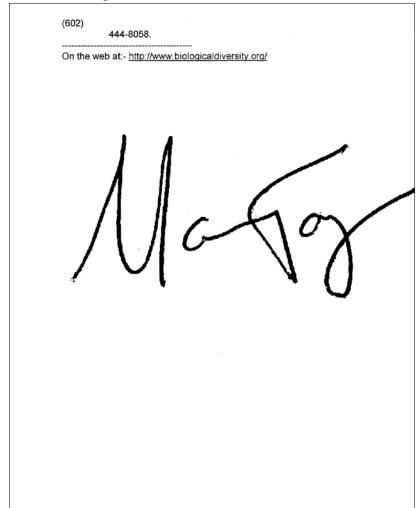
overgrazed land to allow it to rejuvenate.

Reach the reporter at carol.sowers@arizonarepublic.com or

Page 6-98

Chapter 6: Public Comments and Responses

Letter 16, Page 35



Letter 17, Page 1



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TUCSON FIELD OFFICE

November 14, 2001

David McIlnay Bureau of Land Management 12661 E. Broadway Tucson, Arizona 85748

RE: Las Cienegas Resource Management Plan & Environmental Impact Statement

Dear Mr. McIlnay:

Effective August 1, 2001, Arizona Electric Power Cooperative, Inc. (AEPCO) was reorganized into the following three companies.

- Arizona Electric Power Cooperative, Inc. the generation service provider, owner and operator of the Apache Generation Station.
- Southwest Transmission Cooperative, Inc. the transmission service provider, owner and operator of the transmission system.
- Sierra Southwest Cooperative Services, Inc. the certificated energy service provider, which will also provide the staffing services to AEPCO and SWTransco.

The headquarters for the above three companies will remain at 1000 South Highway 80, Benson, Arizona, 85602. All internal contacts and their telephone numbers will also remain the same.

The staff of Southwest Transmission Cooperative, Inc. (SWTransco) has reviewed the Draft Las Cienegas Resource Management Plan (RMP) and Environmental Impact Statement (EIS) for potential impacts to its Pantano-Kartchner (PA-KA) 115kV transmission line and offer the following information and comments.

SWTransco's Pantano Substation and approximately 24.8 miles of the right of way for the PA-KA 115kV transmission line are located within the boundaries of the Las Cienegas planning area. This includes transmission line structures 1-121, from Pantano Substation to approximately 2 miles north of US Highway 82 and structures 137-193, south of US Highway 82 to the Fort Huachuca Military Reservation boundary.

17- 1

Alternative 3 of the Draft EIS identifies Section 7, Township 18 South, Range 8 East, as being designated an Area of Critical Environmental Concern (ACEC). If this management plan is seriously requests that restrictions not be imposed that would limit our access road and transmission line maintenance activities on approximately one mile of the right of way for structures 37, 38 & 39.

17- 1. Utility owners would be allowed through ACEC's to access to their facilities, but required to stay on designated roads. To avoid impacts to wildlife and vegetation, maintenance methods would be restricted.

Letter 17, Page 2

David McIlnay November 14, 2001 Page 2

Alternatives 2, 3 and 4 have identified portions of Sections 7 and 19, Township 18 South, Range 18 East and Section 9, Township 19 South, Range 19 East, as a designated utility corridor. These are areas where segments of the PA-KA 115kV transmission line are currently located. As a designated corridor for new and existing utilities routed through this portion of the Las Cienegas Conservation Area (LCNCA), SWTransco does not anticipate any significant impacts to its existing facilities as a result of this designation. However, it should be noted that increased use by the public of the transmission line access roads will increase SWTransco's liability and could increase the potential for damage to SWTransco's transmission line facilities.

All of SWTransco's transmission line maintenance activities are ground based. To ensure the reliability of its transmission system, SWTransco must be allowed to continue to maintain all access roads associated with the PA-KA line located within the LCNCA, and to maintain clear work areas around the base of each structure to provide a safe work area for line maintenance personnel and equipment set up.

Due to prohibitive cost, SWTransco requests that owners of existing high voltage transmission lines not be required to remove, relocate or replace existing facilities with underground installations and that new facilities not be required to be constructed underground within the boundaries of the LCNCA. As the Sierra Vista area continues to develop, SWTransco anticipates that it may be necessary to upgrade the existing 115kV transmission line to 230kV to meet the increase in demand for electricity associated with this growth.

- SWTransco would greatly appreciate the opportunity to partner with the BLM in this planning process and to discuss any proposed road closures that would limit its access or seasonal restrictions that could impact transmission line maintenance activities.
- 17-6 SWTransco supports the selection of Alternative 3, as having the least impact on the operation and maintenance of SWTransco's PA-KA 115kV transmission line.

Sincerely,

William N. Wells III

William H. Wells III Land Services Administrator

c: G. Grim B. Riley M. Saunders T. McCaulou PA-KA 115kV File

- 17-2. The utility maintenance access road in Section 7 can only be reached and traveled from the north and the south. This road is not passable as a direct route due to the high erosion in the center. In section 19, BLM may consider closing that segment of the access road to the public if an alternative route can be found.
- 17- 3. SWT and other authorized utility companies do have legal rights to maintain their access roads. It is the user's responsibility to minimize maintenance activities, not be excessive in trimming or clearing vegetation and trees, not harm wildlife, and conform with the NCA values and goals.
- 17-4. Utility owners should not be required to relocate or remove facilities from existing corridors unless they are abandoned. However, any major modifications to existing lines or new rights-of-ways will be considered and analyzed. Whether new or modified facilities are to be approved will be determined on a case by case basis after a NEPA analysis which will consider all the impacts of the proposal. Decisions on whether utilities would best be placed above ground or underground and other specific design features of each project will also be determined through the NEPA process.
- 17- 5. BLM can and will meet with SWT and any other utility companies to further discuss the effects of proposed road closures and access to their facilities.
- 17- 6. Your comment has been noted.

Letter 18, Page 1

November 23, 2001

ATTN: Shela McFarlin, Field Manager Tucson Field Office Bureau of Land Management

FROM: Lorena Babcock Moore Geologist 217 W. Rock St., Corona de Tucson, AZ 85641 (520) 762-0605

Dear Ms McFarlin,

Below are my comments on the Draft Las Cienegas Resource Management Plan and Environmental Impact Statement. I have addressed five issues, numbered in descending order of significance to this area worthy of protection and conservation.

1. Grazing and Cattle Ranching:

I am opposed to the continuation of any grazing or ranching activities within the conservation area. There is nowhere that has not sustained damage, sometimes severe and lasting, during the area's history as a ranch. The current rancher's use of "enlightened" management practices only serves to emphasize that the conservation area cannot support grazing, since much of the area that his cattle use is in poor condition. I do not support any cattle grazing on public land, but it is particularly offensive when a tiny piece of land singled out as a "National Conservation Area" (presumably at least partly for its national ecological significance) is managed primarily as one man's hobby ranch.

2. Botanical Inventory

In the current plan, the discussion of the vegetation reports only classifications and conditions based on rangeland management criteria: important forage plants were studied along narrow "transects" to determine an area's value as pasture. This is inappropriate for a conservation area, even if it is to be managed primarily as grazing land. Ecological classification and assessment of conditions should be based on studies of all the plants that occur naturally (or should occur) and on comparison with similar habitats outside the planning area. A comprehensive botanical inventory of the entire area is needed. The lack of such basic natural history information, and stated intent to gather it - not even a preliminary "flora" list, in a management plan that was five years in the making, is inexcusable.

18-3 NOTE: The needle-spined pineapple cactus (Echinomastus erectocentrus var. erectocentrus), a "BLM Sensitive Species", does occur in the planning area.

3. Unaddressed Cienega

At the end of Road EC-903, in the heart of the planning area, is a small cienega that is close to a parking/camping site on Cienega Creek. So far, human visitors have respected this fragile place,

- Your comment has been noted. The ecological conditions on the Empire-Cienega, Empirita, and Rose Tree ranches have been inventoried using methodologies approved and/or recognized by the BLM, NRCS, Arizona State Land Dept., University of Arizona, USDA, ARS, and others. These lands have been determined to be in satisfactory or better ecological condition and the watershed and majority of riparian systems have been determined to be in properly functioning condition. BLM has a mandate to allow multiple uses including grazing if the use is determined to be based on sustained vield. Furthermore, section 4 (a) of the Las Cienegas NCA Act, prescribes the conservation, protection, and enhancement of fourteen unique and nationally important resources and values while "allowing livestock grazing and recreation to continue in appropriate areas". The Act further states that the Secretary "shall permit grazing subject to all applicable laws, regulations, and Executive orders consistent with the purposes of this Act". The four ranches in the NCA and acquisition boundary support several generations of five or six families and provide employment and opportunities to many other people in the community.
- 18-2 The vegetation communities on the majority of public lands in the planning area (including both the NCA and Acquisition Planning District) were inventoried for this planning effort in 1995, using

Letter 18, page 1 (continued)

18-2. (continued)

the Ecological Site Inventory methodology recognized by BLM, NRCS, Universities, Federal and State governments. This method is based on soil surveys, correlation of ecological sites, and evaluation of the current plant communities (in their totality) as compared to the Potential Historic Climax Plant Community (from a relict or reference area) that the ecological site is capable of producing. Each transect consists of 200 - 40x40 cm plots which covers about an acre. Thirty-two permanent study sites were established on the Empire-Cienega Ranch alone. Plant composition by weight is determined on the site as is current years vegetation production. These study sites represent a "key area" within a particular unique ecological site within a mapping unit. The process is more completely explained in the NRCS and BLM manual and technical references. In addition to the ecological site inventories and riparian inventories, a plant inventory and collection was initiated on the then Empire-Cienega Resource Conservation Area shortly after the public lands were acquired in 1988. The University of Arizona herbarium assisted with plant identification and over 170 species were identified.

- 18-3. Thank you for this information.
- 18-4. Canello Hills ladies' tresses have never been verified on the NCA but additional inventories are needed. Some inventories are planned for 2002. There are a number of small springs with shallow wetlands in the Cienega Creek floodplain from Gardner Canyon to Springwater Canyon. The most notable of these are the ponds near Cinco Canyon which represent the largest and deepest in the area. These and other shallow wetlands (some of which are dry most summers) are subject to seasonal grazing. Not all of these have been located, delineated, season of surface water presence recorded and evaluation for ecological function evaluated (Proper Functioning Condition, USDI 1993). Those that had been located and mapped were included on Map 3-. However, they did not show up well on the map at the scale it was printed in the Draft plan and the map has since been revised. Since a wildfire this spring burned through much of this area, the wetlands are much easier to locate and subsequent inventory and mapping is planned. The "black water" wetlands that you refer to may be in lower Empire Gulch, which except for its upper tip has been excluded from livestock because of the presence of Huachuca water umbel. This area has become increasingly wetter during the last decade, as the watershed and rangeland condition has improved in the surrounding uplands. During the past ten years, the riparian area has expanded for almost a mile northwest from its confluence with Cienega Creek. The flow of sub-irrigation water from Empire Gulch has also increased over the years, causing formerly dry depressions in the benches to become wetted "ponds". Some of these ponds have replaced dry, sacaton bottoms and developed into Interior Marshland habitat. These on-going changes have resulted in the need to adapt management practices. The rancher has had to build fences to exclude some of these ponds to prevent cattle from getting bogging down in the mud. Similarly, other fencing or management changes may be necessary to maintain or restore ecological function in wetland areas. A riparian management action has been added common to Alternatives 2, 3, and 4 to complete an inventory of these wetland areas and determine future management needs.

Letter 18, page 2

18- 4 cont. possibly because of the formidable hackberry, graythorn, and mesquite thickets that surround most of it. It is a black spring in a marshy depression with abundant yerba mansa and sedges. It is a significant source of water, shade, and shelter for wildlife and birds. It appears to have been used for cattle mostly in winter, and even then infrequently. It offers good habitat for the Canelo Hills Ladies' Tresses (Spiranthes delitescens), though when I went there to search for the plant haugust 2001, I arrived only hours after cattle had been allowed into the area - there were several cows in the water and the marsh plants had been trampled into a wallow of mud and cow droppings. This place is mentioned nowhere in the plan - not even as a spring or a cattle tank.

3. Plant Collection

18- 5

Collecting plants for building materials, crafts, medicinal use, or religious purposes is inappropriate in the Conservation Area, no matter who is doing the collecting. Collecting is allowed on hundreds of square miles of nearby National Forest, State, and BLM lands (some just across the road from the Conservation Area) that are under no special protection. Basketry plants such as beargrass and yucca are also inexpensive and easy to cultivate. Collecting may be necessary for certain scientific studies, although good photos and GPS locations can often be as useful as voucher specimens, and are more easily shared with other scientists and the public.

4. Shooting

18-6

The plan makes no mention of target shooting, which I have encountered while hiking in the conservation area near Cienega Creek. Will BLM continue to allow unregulated shooting? A designated firing range would ultimately create a hazardous waste disposal problem as lead (and undoubtedly garbage) accumulate. I suggest banning all target shooting in the conservation area.

5. Road Use

18-7

Off-road vehicle use will undoubtedly increase in the area as explosive development continues southeast of Tucson. The destruction of vegetation (including large trees) in washes on National Forest land in heavy-traffic areas such as Rosemont, Greaterville, and Gardner Canyon shows that abuse increases with use. I suggest that BLM require all vehicles (even quads, motorcycles, dune buggies etc.) to have mufflers, so they will at least minimize noise, and require these vehicles to stay on designated roads and out of all washes. The closure of washes and roads should be indicated with heavy-duty bars, gates, or grates that will disable a vehicle that tries to cross, not with the current system of nearly-invisible tiny brown signs that are easily ignored or driven over. In at least one case (Wood Canyon), the closure is due to a serious safety hazard due to soil piping that is forming large holes in the road.

18- 5. The BLM has a mandate to allow multiple uses including collecting of plants to meet the public needs and desires if the use is determined to be based on sustained yield and does not adversely affect the existing plant communities or preclude achieving vegetation or watershed objectives. Certain plants are protected and rules are developed to regulate the collection of any plants or plant products to ensure the collections are regulated and do nor adversely affect the environment (NEPA, ESA, Policy, Regulation, Permits). 43 CFR 8365.1-5(b)(1) provides for collection of plants referenced in the plan: (b) "Except on developed recreation sites and areas, or where otherwise prohibited and posted, it is permissible to collect from the public lands reasonably amounts of the following for noncommercial purposes: (1) Commonly available renewable resources such as flowers, berries, nuts, seeds, cones and leaves..." Tohono O'odham basket weavers have been harvesting plant products in the planning area for many years. Members of the Tohono O'odham Basketweavers Organization (TOBO) have stated that they wish to continue harvesting basket weaving materials in the planning area, including bear grass, devil's claw and yucca leaves. They consider the harvesting of basketmaking materials in the planning area to be a traditional use which extends back into prehistoric times. The Tohono O'odham Nation claims an ancestral affiliation with the Hohokam and

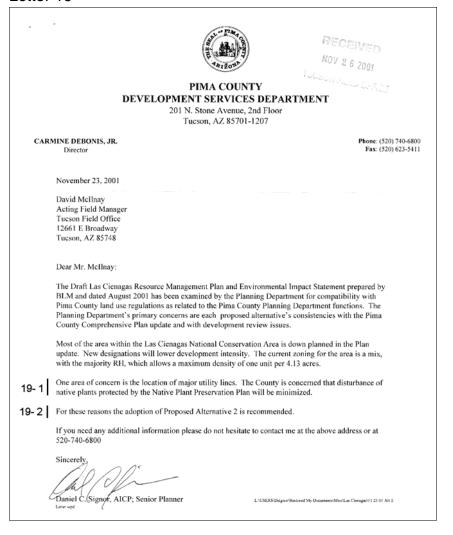
Letter 18, page 2 (continued)

18-5. (continued)

Sobaipuri Indians who inhabited the planning area and surrounding lands. The U.S. government, BLM and the State of Arizona officially recognize this claim. Cultural materials excavated from archaeological sites in the planning area and from nearby sites show that both the Hohokam and the Sobaipuri did use bear grass and yucca to weave baskets, mats, bags and various other items used in daily life. Plant collecting by other Native Americans, including those from the San Carlos Apache and Hopi tribes could also be accommodated under this CFR. All plant collecting would require a permit. Collecting would be monitored and regulated to ensure that over-harvesting did not occur.

- 18-6. Regulations are already in place that allow target shooting but in a safe manner (43 CFR). If target shooting occurs in a manner which is unsafe, endangers people or creates hazardous conditions, or destroys property or resources, then BLM is authorized to issue citations, or close areas to target shooting. No shooting ranges are proposed under any alternative. See also NCA Act in Appendix 1.
- 18-7. The requirement of mufflers is addressed in 43CFR standards 8343.1 and will be part of the rules and regulations of the public lands in the NCA and Acquisition Planning District. The requirement of mufflers should also reduce noise levels, as should the "not to exceed 25 miles per hour unless otherwise posted" rule. Not driving in washes is addressed in the supplementary rules. Driving in washes is prohibited unless a wash is part of a designated road. A range of options will be considered in closing roads. In some areas, simple carsonite signs have been effective. In other areas, such as those that you refer to, signing has not been effective and structural closures will be necessary.

Letter 19



- 19-1. Surveys for sensitive plants and animals and cultural resources are conducted as part of compliance with National Environmental Policy Act (NEPA). Avoidance or mitigating measures are prescribed as appropriate prior to authorization of any surface-disturbing activities including construction of major utility lines. The designation of utility corridors helps to limit such impacts to specific locations and in the case of the proposed action to areas with existing surface disturbance.
- 19-2. Your comment has been noted.

Letter 20, page 1

Draft Las Cienegas RMP/EIS Comments Sheldon D. Clark H.C. 1 Box 215 Elgin, AZ 85611 November 22, 2001 Mr. David McIlnay Acting Field Manager Tucson Field Office Bureau of Land Management 12661 E. Broadway Tucson, AZ 85748 RE: DRAFT LAS CIENEGAS RESOURCE MANAGEMENT PLAN AND ENVIRONMENTAL IMPACT STATEMENT Dear Sir: Per your letter dated August 10, 2001, I would like to offer the following comments for consideration in the preparation of the Final Las Cienegas Resource Management Plan (RMP) and Environmental Impact Statement (EIS). 1. Intermixed Lands - The BLM staff has done exceptional work in the preparation of the draft resource management plan. However, implementation of the resource management plan will require close coordination with the State Land Department, a task that is subject to a multitude of complications associated with multi-jurisdictional programs, to say nothing of the conflicting mandates of the Las Cienegas RMP and the State Land 20-1 Department. The BLM and the State of Arizona must immediately implement a program to transfer title of the Empire, Cienega and Rose Tree grazing leases from the State Land Department to the BLM. Both agencies are encouraged to explore the possibility of sale, exchange, friendly condemnation or other viable means to transfer title of these leases. Until transfer of title is realized, any attempts at multi-jurisdictional management will be 2. Recreational Management – The preferred alternative should be expanded to give consideration to the establishment of a visitor/learning center in or near the village of 20-2 Sonoita. This center would serve to educate the public of recreational opportunities consistent with the RMP, provide need economic stimulus to eastern Santa Cruz County, and provide a logical center for management of the Las Cienegas NCA. 3. Interagency cooperation - The BLM leadership is encouraged to coordinate implementation of the RMP with the U.S. Forest Service to insure consistency in 20-3 management goals where BLM and USFS boundaries are contiguous. Interagency cooperation is particularly critical with respect to management of Off Road Vehicle use.

- 20-1. See response 16-6.
- 20- 2. The RMP addresses only BLM managed lands within the NCA. Although locating a visitor center in Sonoita is not within the scope of this document, careful consideration and evaluations to determine cost effectiveness of a visitor center in Sonoita should occur before a decision is made. An interpretive master plan and market analyses would be required. Many opportunities exist to develop a community based visitor center in the Sonoita area. All proposals and locations should be evaluated for purpose, effectiveness and desirability by the community.
- 20-3. The BLM will be coordinating implementation of the RMP with the US Forest Service and other state and federal agencies as appropriate.

Letter 20, page 2

| | Draft Las Cienegas RMP/EIS Comments 11/22/2001 |
|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 20- 4 | Grazing – The adopted management plan should insure that multiple uses, including grazing, are permitted to insure consistency with the management objectives and goals of the local stakeholders. |
| 20- 5 | In closing, I would like to thank the BLM staff for their dedicated efforts in developing a management plan that is flexible, yet consistent with a commitment to the principle of multiple uses, as envisioned by the participants of the Sonoita Valley Planning Partnership. I appreciate the opportunity to provide these comments for your consideration. |
| | December 16.11 and make 1 |
| | Respectfully submitted, |
| | Sile DELL |
| | Sheldon D. Clark |
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- 20- 4. See response to Letter #20.
- 20-5. Thank You for your comment.

Letter 21, page 1



November 23, 2001

David McIlnay Acting Field Manager Tucson Field Office Bureau of Land Management 12661 E. Broadway Blvd. Tucson, AZ 85748

Dear Mr. Mcllnay:

21-1

21-3

Thank you for the opportunity to review and comment upon the *Draft Las Cienegas Resource Management Plan and Environmental Impact Statement* (RMP/EIS) dated August 2001. The Sonoran Institute (SI) works with communities in western North America to protect healthy landscapes, support vibrant economies, and promote livable communities.

SI would like to congratulate the Bureau of Land Management (BLM) and the Sonoita Valley Planning Partnership (SVPP) on this proposed resource management plan, which represents years of hard work and collaboration by the BLM and a wide variety of agencies, organizations, landowners, individuals, and other stakeholders. The desired resource conditions that form the foundation of the proposed plan incorporate the knowledge of many experts, and will ensure that the unique natural and cultural resources that Las Cienegas National Conservation Area (LCNCA) was established to protect are indeed well protected and managed.

The Sonoran Institute expresses our strong support for Alternative 2, the alternative preferred by the SVPP. This plan would best achieve the resource protection goals put forward by the SVPP and highlighted in the Congressional act establishing Las Cienegas NCA.

We also submit the following two comments:

1. Protection of the state trust lands within LCNCA and the Sonoita Valley Acquisition Planning District (SVAPD) is a critical priority, for these lands are subject to disposal and development by the Arizona State Land Department until they are protected through one of several potential approaches, including: reclassification of these lands for conservation purposes through amendment of the Arizona constitution and federal legislation, federal acquisition of a fee interest or conservation easement, or a state to federal land exchange. These lands must be protected as soon as feasible if the purposes of LCNCA are to be realized and the protection of this remarkable area is to become a reality.

- 21-1. Thank You for your comment.
- 21-2. Your comment has been noted.
- 21- 3. See response 16-6.

Letter 21, page 2

David McIlnay November 23, 2001 Page 2

21-4

2. We encourage the BLM to locate the NCA's proposed visitor center within the adjoining "gateway" community of Sonoita. Sonoita's location adjoining LCNCA and between the large northern portion and the smaller, noncontiguous southern portion that includes the Audubon Research Ranch makes it an ideal setting for a visitor center. Placement of the proposed visitor center in Sonoita will both allow the community to experience immediate benefits from its neighboring protected area and avoid development within the boundaries of the protected area. At the visitor center, visitors will be able to view and learn about the Cienega Creek valley's native grasslands and the surrounding "sky island" mountain ranges they link, while also having immediate access to the amenities provided by Sonoita. Local community groups including the Sonoita Crossroads Community Forum and the Sonoita Chamber of Commerce have indicated strong interest in working with BLM to develop an outstanding visitor center for Las Cienegas NCA.

The Sonoran Institute looks forward to working with BLM and the SVPP participants to help implement this Resource Management Plan and to continue developing an effective monitoring system that will allow for successful application of the adaptive management principles it embraces.

Thank you again for the opportunity to comment on this proposed RMP.

Sincerely,

Executive Director

21- 4. See response 20-2.

Letter 22, page 1

PHIL R. OGDEN PROFESSOR AND RANGE EXTENSION SPECIALIST, RETIRED 7123 E. CALLE ARTURO TUCSON, AZ 85710

e-mail: ogdenp@azstarnet.com Phone: (520)296-7856

November 21, 2001

David McIlnay, Acting Field Manager Tucson Field Office 12661 E. Broadway Tucson, AZ 85748

Dear David:

Subject: Comments on Draft Las Cienegas Resource Management Plan and Environmental Impact Statement

Background

My professional experience in the Sonoita Valley area began in the fall of 1964 when I became a faculty member at the University of Arizona. Since that time, I have been involved in regular visits and numerous activities within the area. The activities include range research, inventory, management, monitoring, and class and other educational field trips. Currently, I am a member of the Empire-Cienega Ranch biological planning team. I am very interested in the future management of the Las Cienegas NCA and the Sonoita Valley Acquisition Planning District. I have reviewed the draft plan and EIS submitted for review, and my comments are in the following paragraphs.

General

With multiple alternatives, issues, resources, uses, objectives, management activities, and impacts, it is difficult to avoid the redundancy that makes a document like this so difficult to write, to read, and to make specific comments that will make any major changes in future activities. I have no suggestions on how to improve this problem. I do support a decision that will implement Alternative 2, the alternative preferred by both BLM and the participants in the Sonoita Valley Planning Partnership. Most of the meaningful comments have already been placed on the table and discussed during the Sonoita Valley Planning Partnership process.

Planning Issues 11, p. 1-19 and 12, p. 1-20

22-2 Editorial: Issues 1 through 10 are listed in bold italics. To be consistent, issues 11 and 12 should also be bold italics.

Rangeland Health, ¶ 4, left column, p. 2-6 beginning, "Attempting to achieve...

- 22-3 | Editorial: add "on" in second line (community on ecological sites....).
- 22-4 Comment: Attempting to achieve the historical plant climax community on an ecological site is no guarantee that appropriate management actions will be taken to maintain or achieve

- 22-1. Thank you for your comment.
- 22- 2. Your comment has been noted and the text has been modified in Chapter 1: Planning Issues.
- 22- 3. Your comment has been noted and the text has been modified in Chapter 2: Desired Conditions:Rangeland Health.

Letter 22, page 2

Comments, Las Cienegas Draft, Ogden, p. 2

physical function and biological health of a range ecosystem. Presently, a mesquite and Lehmann lovegrass plant community dominates much of the loamy upland ecological site on the low alluvial terraces adjacent to the Cienega Creek bottomlands. I do not expect the Bureau of Land Management to have the physical or economic resources to change this community back to the historical climax. The good news is that this plant community does maintain, and perhaps even improve, upland soil/site stability and hydrologic function as well or better than the historical climax. The best management actions will be developed by focusing on management of this existing community rather than emphasizing trying to change it to the historical climax.

22- 4 cont

Recommendation: Replace the last sentence (Actions selected) of this paragraph with the following statement: When it is unrealistic and/or physically and economically infeasible to attain the historical climax plant community, management actions should emphasize maintaining upland soil/site stability and hydrologic function of the site.

Alternative 1 Livestock Grazing Management Actions, Table 2-12, p. 2-73

22-5

<u>Comment</u>: Table column headings "BLM Cows" and "ASLD Cows" are misleading. The cows are all privately owned.

Recommendation: Column 6 should be "Cows on BLM" not "BLM Cows" Column 9 should be "Cows on ASLD" not "ASLD Cows"

$\underline{ Alternative 1 Livestock Grazing Management Actions, \P2, \ left column, p. 2-73, beginning ``lf the four... }$

Comment: The term "available forage" at the beginning of line 5 of this paragraph suggests to many readers that the percentages which follow in the paragraph are percentage forage utilization levels which would be observed on the range in favorable, normal, and unfavorable years. In reality, as calculated in this document, the percentages represent the portion of forage allocated to livestock use.

22-6

The Range Inventory Standardization Committee, Society for Range Management defined **Available Forage** as: "...that portion of the forage production that is <u>accessible</u> (underline added) for use by a specified kind or class of grazing animal." (RISC. 1983. Guidelines and Terminology for Range Inventories and Monitoring. Report to Board of Directors). This same definition for available forage is found on p. 43 of BLM TR 4400-3 (1984), Rangeland Monitoring - Utilization Studies, and in other manuals of this series.

The method of calculating available forage as used in this publication, however, is described at line 12, paragraph 2, right column, p. 2-73 as: "...50% of the total vegetation produced multiplied by the current 50% utilization rate on those lands allocated for livestock grazing." The multiplication of the total vegetation production by 50% is a calculation of available forage, as defined in the paragraph above. The second multiplication by a 50% utilization rate provides an estimate of the portion of the total vegetative production that is allocated to livestock and is usually referred to as useable forage. Useable Forage is defined in both of the references provided above as: "...that portion of the forage that can be grazed without damage to the basic resources; may vary with season of use, species, and associated species."

- 22-4. The point you make is a good one. It can be very expensive, and perhaps even impossible, to restore all the ecological sites to their historic climax plant community. We do however believe it is a satisfactory vegetation goal to seek. We believe that those areas invaded by mesquite and Lehmann's lovegrass are not the "desired plant communities" the group wanted to achieve. The native grassland would be preferable to them. However through the Biological Planning Process and the NEPA process the facts that you presented would be brought out. The economic or biological feasibility would be brought to everyone's attention and one of the alternative would be chosen as the decision.
- 22- 5. Your comment has been noted and the text in Table 2-12 has been modified to change column headings as recommended.
- 22- 6. Your comment has been noted and the text in Chapter 2: Livestock Grazing Management Actions has been modified as recommended.

| | Comments Los Cianosas Porte Codes a C |
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| | Comments, Las Cienegas Draft, Ogden, p. 3 |
| 22- 6 cont | Recommendation: Change available to allowable at the beginning of line 9, ¶2, left column, p. 2-73, and at line 7 of this paragraph, after "unfavorable years (Table 2-13).", insert the sentence: These percentages are the portions of the forage allocated for livestock grazing (useable forage) that are utilized in the scenarios presented. |
| | Alternative 1 Livestock Grazing Management Actions, line 13, ¶ 2, right column, p. 2-73 |
| 1 | Comment: Based on previous comment |
| 22-7 | Recommendation: Change "available forage" to useable forage |
| | Alternative 1 Livestock Grazing Management Actions, Tables 2-13 and 2-14, p. 2-734 |
| | Comment: Based on previous comment |
| 22-8 | Recommendation: Change headings of columns 7 and 8 from Available Forage to Useable Forage |
| | Alternative 1 Livestock Grazing Management Actions, line 2, left column, below Table 2-14 |
| ا ۵۵ ۵ | Comment: Based on previous comment |
| 22-9 | Recommendation: Change "the percentage available" tothe percentage useable |
| | Alternative 2 Livestock Grazing and Recreation Management Actions, line 8, ¶ 2, left column, p. 2-101 |
| 22-10 | Comment: Based on previous comment |
| 22-10 | Recommendation: Change "The available forage" to The useable forage |
| | Alternative 2 Livestock Grazing and Recreation Management Actions, Tables 2-21, 2-22, and 2-23, pp. 2-102 and 2-103 |
| | Comment: Based on previous comment |
| 22-11 | Recommendations: Change column 6 heading from BLM Cows to Cows on BLM and Column 8 heading from ASLD Cows to Cows on ASLD |
| | In line 4 of footnote 2, Table 2-21, Change "The available forage" to The useable forage |
| | Alternative 2 Livestock Grazing and Recreation Management Actions, Table 2-24 |
| 20.40 | Comment: Based on previous comment |
| 22-12 | Recommendation: Change headings for columns 7 and 8 from Available Forage to Useable Forage |
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- 22-7. Your comment has been noted and the text in Chapter 2: Livestock Grazing Management Actions has been modified as recommended to change available forage to useable forage.
- 22- 8. Your comment has been noted and the text in Tables 2-13 and 2-14 has been modified to change column headings as recommended.
- 22- 9. Your comment has been noted and the text in Chapter 2: Livestock Grazing Management Actions has been modified as recommended to change percentage available forage to percentage useable forage.
- 22-10. Your comment has been noted and the text has been modified as recommended to change available forage to useable forage.
- 22-11. Your comment has been noted and the text in Tables 2-21, 2-22, and 2-23 has been modified as recommended.
- 22-12. Your comment has been noted and the text in Table 2-24 has been modified as recommended.

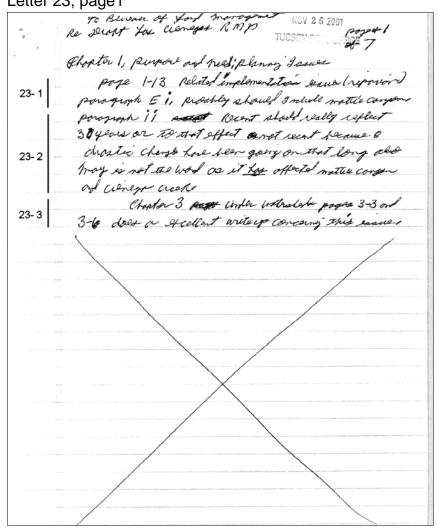
| | Comments, Las Cienegas Draft, p. 4 |
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| | Alternative 3 Livestock Grazing and Recreation Management Actions, lines 3 and 4, ¶ 1, right column, p. 2-121 |
| 22-13 | Comment: Based on previous comment |
| | Recommendation: Change "available forage" to useable forage in these 2 lines |
| | Alternative 3 Livestock Grazing and Recreation Management Actions, Table 2-28, p. 2-121 |
| ا ۱، ۵۰ | Comment: Based on previous comment |
| 22-14 | Recommendation: Change column 6 heading from BLM Cows to Cows on BLM and column 8 heading from ASLD Cows to Cows on ASLD. |
| | Alternative 3 Livestock Grazing and Recreation Management Actions, Table 2-29, p. 2-122 |
| | Comment: Based on previous comment |
| 22-15 | Recommendation: Change headings for columns 7 and 8 from Available Forage to Useable Forage. |
| | Alternative 4 Livestock Grazing and Recreation Management Actions, line 13, ¶ 4, right column, p. 2-130 |
| 22-16 | Comment: Based on previous comment |
| | Recommendation: Change "The available forage" to The useable forage |
| | Alternative 4 Livestock Grazing and Recreation Management Actions, Table 2-31, p. 2-131 |
| - 1 | Comment: Based on previous comment |
| 22-17 | Recommendation: Change headings for columns 9 and 10 from Available Forage to Useable Forage |
| | Glossary, p. G-2 |
| 22-18 | Comment: The definition provided for Available Forage in this glossary is inconsistent with the definition recommended by the Range Inventory and Standardization Committee, Society for Range Management and adopted by BLM as discussed previously in my comments. This inconsistent use of terminology easily leads to misunderstanding and argument as to what the percentage forage use numbers really mean. |
| | Recommendation: Omit the definition of Available Forage in this glossary and add the definition of Useable Forage: "That portion of the forage that can be grazed without damage to the basic resources; may vary with season of use, species, and associated species." |
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- 22-13. Your comment has been noted and the text has been modified as recommended to change available forage to useable forage.
- 22-14. Your comment has been noted and the text in Table 2-28 has been modified as recommended.
- 22-15. Your comment has been noted and the text in Table 2-29 has been modified as recommended.
- 22-16. Your comment has been noted and the text has been modified as recommended to change available forage to useable forage.
- 22-17. Your comment has been noted and the text in Table 2-31 has been modified as recommended.
- 22-18. Your comment has been noted and the definition of useable forage has been incorporated into the Glossary.

| Lette | r 22, page 5 | | |
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| | Comments, Las Cienegas Draft, Ogden, p. 5 <u>Conclusion</u> | | |
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| This document does provide background for communication regarding future managactions, and should be technically correct. I have seen small misconceptions definto large communication issues. Attention to detail and consistency are important management plans and Environmental Impact Statements. | | | |
| 22-19 | My comments and recommendations do not change my support for Alternative 2 as the decision alternative. | | |
| | Sincerely yours, | | |
| | Phile Og Len | | |
| | Phil R. Ogden, Retired | | |
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22-19. Your comment has been noted.

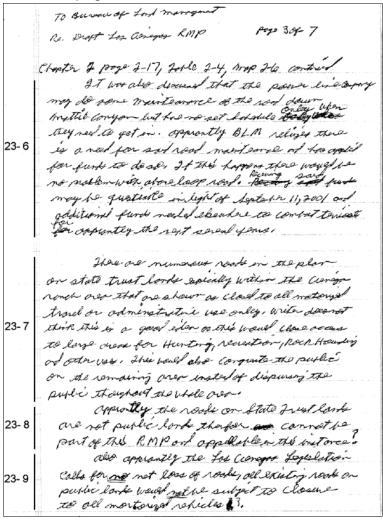
Chapter 6: Public Comments and Responses



- Your comment has been noted and the text has been modified to include Mattie Canyon.
- Your comment has been noted and the text has been 23- 2. modified.
- Thank you for your comment.

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- 23- 4. Your comment has been noted and Map 2-6 has been corrected showing the road to Edwards well open.
- 23- 5. Back roads are subject to closure during rainy season for human safety and to prevent damage to resources. Text has been added to the road designation management actions to clarify that administrative use roads may be opened temporarily as alternative access routes for public use roads which need to be closed for resource or public safety reasons.



- 23- 6. Deferred maintenance dollars have been requested in BLM's operating budget for Las Cienegas to maintain back country roads. We do not know yet if the funding has been granted.
- 23-7. See response 13-3. Yes, use may be concentrated in some areas, however it is intended that concentrated use will be monitored and managed. Also note that roads on State Trust lands cannot be designated and designations implemented through this plan, only if the lands are acquired by BLM.
- 23- 8. You are correct. Designations or other management of roads on State Trust Lands are not being prescribed in this plan. However, some proposed route designations on intermixed State Lands were included to show designations that would be enacted should the lands be acquired by BLM.
- 23-9. Rather than calling for no closures of roads to motorized vehicles as stated in your comment, the Las Cienegas NCA Act says that the management plan will include "provisions designed to ensure that if a road or trail located on public lands within the Conservation Area, or any portion of such a road or trail, is removed, consideration shall be given to providing similar alternative access to the portion of the Conservation Area serviced by such removed road or trail." Many of the road closures proposed in this plan are for roads which provide duplicate access to the same area Other road closures are necessary to protect sensitive resources, to avoid hazardous situations, or to provide an alternate of non-motorized access to an area.

| | To Bureau of Land management RE Duget For Congres RAP. Page 406-7 |
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- 23-10. The text has been modified to include Blue Grama.
- 23-11. See response 2-1.
- 23-12. See responses 2-2 & 2-3.

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- 23-13. Your comment has been noted.
- 23-14. Your comment has been noted and text in Chapter 3 on water wells has been corrected.
- 23-15. Thank you for this information.

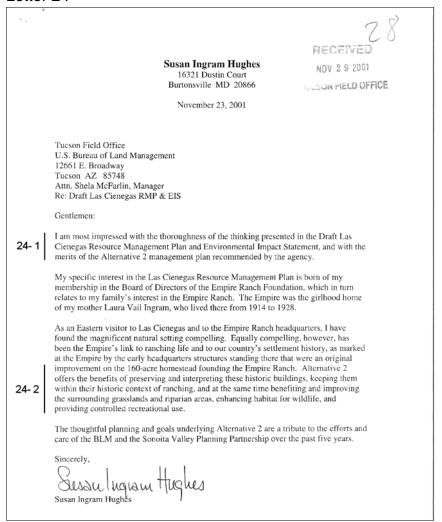
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- 23-16. Thank you for bringing this information to our attention. We have expanded the description of prescribed fire history in Chapter 3 to incorporate this information.
- 23-17. Thank you for bringing this information to our attention. We have expanded the description of Prime and Unique Farmlands in Chapter 3 to incorporate this information.

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| 23-20 | Om not about on the Gerald Korte ago W lines here to the State of the Country State of the Co | | | |
| | 520-297-3737 | | | |
| | <u> </u> | | | |

- 23-18. Harry L. Heffner's letter, dated, "Feb. 5th, 1954," to Mrs. Mary Souders, formerly Mrs. Frank Boice, references "...an adobe walled barn, roofed, (where Mr. Vail always kept his top horse and Tom Turner kept his also and of course the wranglers horse)..." Mr. Heffner's letter states that, "All the other buildings at the headquarters including the house you live in and the barn etc in the rear were added when Mr Vail brought Mrs Vail to the Empire as a bride which I think was 1884." A copy of this letter is on file at the Tucson Field Office.
- 23-19. Yes, new livestock or supplemental feed for livestock could be sources of noxious weeds or invasive species.
- 23-20. Your comment has been noted and you have been added to the list of public in Appendix 5.

Letter 24



- 24-1. Thank You for your comment.
- 24-2. Thank You for your comment.

| | 20, page : | NGV 2 7 200 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| | November 23, 2001 | TUCSON MELD O |
| | | TUDSUM PREMIO |
| | | 533 Suffolk Drive Sierra Vista, AZ 85635 |
| | David McIlnay Acting Field Manager Tucson Field Office Bureau of Land Management 12661 E. Broadway Tucson, AZ 85748 | |
| | Dear Mr. Mclinay: | |
| | This letter provides comments to the Draft Las Cienegas R Environmental Impact Statement. | Resource Management Plan and |
| I support the agency preferred Alternative 2 of the four action alternatives, and be best achieves the optimum balance of resource protection strategies while sustain compatible and traditional resource uses. It also best supports the Las Cienegas N Conservation Area (NCA) legislation, which requires the resource management p include recreation management strategies, including motorized and non-motorize dispersed recreation opportunities for the NCA. | | strategies while sustaining borts the Las Cienegas National resource management plan to |
| | It should be noted that goals developed by the Sonoita Val BLM include establishment of a Sonoita Valley trail syste motorized route for the Arizona Trail (see paragraphs &c a supports these goals while minimizing resource impacts. | em and a primitive, non- |
| | In my view, impacts ascribed to the Arizona Trail appear | overstated in the Draft RMP. |
| 25- 2 | On page 2-140, the Draft RMP describes negative water quality, such as increase in sedimentation for Arizona Trail will use an existing road where it run not believe there would be any trail building sedim | r Cienega Creek. However, the ns close to the creek. Thus, I do nentation impact on the creek. |
| 25- 3 | On page 2-142, the Draft RMP states that trail buil upland vegetation. However, as stated during SVP Trail, new trail development will use existing cattle will minimize new ground disturbance. Thus, belic inaccurate and needs revision. | P discussions on the Arizona e trails for the most part and |
| 25- 4 | Likewise, on page 2-148 the impacts to fish and wi appear overstated since the Arizona Trail route for trail users in the creek. | |

- 25-1. Your comment has been noted.
- 25- 2. Even with no new trail construction, it is well known that dirt roads and trails are subject to erosion due to a lack of cover and continuous disturbance of the soil surface. Particles that are moved by wind and water will eventually find their way downslope to drainages that eventually discharge into Cienega Creek.
- 25-3. Even though the proposal is for the Arizona Trail to utilize existing cattle trails and minimize ground disturbance, the exact route of the trail cannot be determined until cultural resource surveys are done and other impacts are assessed. This analysis may result in cattle trails being used infrequently or not all in trail construction. Therefore, the EIS analyzes the worst case scenario when all new trail construction could disturb up to four acres.
- 25- 4. As stated on page 4-42, hikers are likely to leave the corridor of the Arizona Trail to visit Cienega Creek. This activity is likely to be extensive enough to result in small wildcat trails that cause some level of bank disturbance contributing to bank erosion. We acknowledge that the suggestion was made, during SVPP meetings, to incorporate existing cow trails into construction of the Arizona Trail. However these trails typically occur in a pattern radiating

Letter 25, page 1 (continued)

25-4. (Cont.)

away from existing livestock water sources and eventually disappear. It is debatable how much utility these livestock trails would serve. Many of these trails may be currently contributing to sediment load and erosion. The addition of heavy horse traffic would exacerbate an already undesirable situation. Wildcat trails would need to be closed and rehabilitated as they are created to prevent impacts from increasing. Four acres is probably an underestimate of the disturbance involved in association with the trail as dispersed camping sites would also be established along the trail and ancillary facilities such as a parking lot, trail heads, corrals and watering points along the route may be required. Although the trail will not be in Cienega Creek, users will inevitably be drawn to the creek because of its proximity to the proposed trail. Under such a situation, impacts to aquatic and riparian habitat due to recreation are highly likely.

On page 2-156, the Draft RMP states the Arizona Trail could disturb cultural resources. However, this statement is not consistent with the statement on page 2-3 which says "BLM will prepare site-specific environmental reviews before 25-5 implementing actions proposed in this RMP amendment/EIS". I believe the negative impact on cultural resources will be avoided by the site-specific reviews. On page 2-158, the impact of the Arizona Trail is questionable. 25-6 Likewise, on page 2-162 the statement that "increased recreation use would 25-7 threaten the viability of livestock operations" appears overstated. In summary, I believe the Draft RMP does a good job in analyzing the various alternatives; however, the impacts of recreation and Arizona Trail appear overly negative in my view. Plus the positive social values of trails and recreation for the user public are 25-8 not mentioned at all. Recommend BLM re-look these portions of the Draft RMP and develop a more balanced description of trails and recreation impacts, including the positive values offered by outdoor recreation on our public lands. Thank you for the opportunity to provide these comments. Sincerely, Steve Saway

25- 5. The first sentence of the paragraph on page 2-156 of the Draft EIS, which is referenced in your letter, says that, "The Arizona Trail designation could disturb cultural resources by providing non-motorized access into new areas." This means that the Arizona Trail could provide access into areas where no such trails previously existed, and where cultural resources might be located. The Arizona Trail could in fact serve as a route usable by people disposed to stealing artifacts and looting and vandalizing cultural sites located in these previously unaccessible areas.

In regard to the statement in the second sentence of the paragraph on page 2-156 that "Data recovery could mitigate impacts." In itself, a site-specific environmental review, would not avoid negative impacts and most importantly does not take the place of a plan to mitigate impacts to cultural sites. The environmental review, as explained on page 2-3 of this EIS, would be documented as part of the NEPA analysis. As explained, "the BLM will ensure that the environmental review process included evaluation of all critical elements, including cultural resources...," and "...completes required State Historic Preservation Office (SHPO) consultations." The environmental review ensures that necessary mitigation is provided, which would usually be defined in a mitigation or project plan. Such plans are developed and implemented according to specific criteria stated in BLM

Letter 25, Page 2 (continued)

25-5. (continued)

management manuals. And, they are documents separate from site-specific environmental reviews. Mitigation may require a complete, systematic excavation, or data collection, of a cultural site which is considered an impact.

A site-specific environmental review would contain a record of whether cultural resources are known to be or might be present, a professional judgement as to whether they might be impacted, and suggestion/direction as to future, prescribed course of action, including possible mitigation measures, which might be taken to address any perceived impacts. In the context of this discussion, a site specific environmental review might indicate that there are sites located in a previously unaccessed area where a new trail is proposed, and that the new trail could expose those sites to illegal activities. At that point, a recommendation might be made to not allow a trail to be built into this previously unaccessed area. If a single, or several sites, were located directly in the proposed route of a new trail, a recommendation might be made in to reroute the trail so that it would lead around the site(s), thus avoiding direct disturbance and mitigating impacts.

- 25- 6. Construction of the Arizona Trail across or along legal, existing rights-of-way corridors and land use sites could create serious safety or health hazards for trail users. Existing agreements between the BLM and companies holding legal rights-of-way corridors or permits for special land use do not authorize use of these corridors or land use permit sites to any unauthorized user.
- 25-7. If you read further in Table 2-32, (page 2-162 in the draft document), we state that the biological planning process and recreation management actions under Alternative 2 should reduce and resolve recreation and livestock conflicts and improve prospects for maintaining viable grazing operations. Refer to Chapter 4: impacts to livestock grazing from outdoor recreation under Alternative 2 for a more detailed discussion and compare to impacts under Alternative 1.
- 25-8. Text has been added to Chapter 2, recreation management actions common to Alternative 2, summarizing dispersed recreation opportunities and restrictions. Text has been added to Chapter 4, Alternative 2 impacts of outdoor recreation management on recreation that describes some of the benefits of recreation management strategies. As management guidance for this RMP, BLM Manual 8320 *Planning for Recreation Resources*, addresses basic recreation issues and benefits. Subsequent studies, university curriculums and other bodies of work recognize, study and evaluate the social, spiritual and health related benefits of recreation. Knowledge and application of recreation management is an important component of this planning document. Careful consideration for compatible recreation opportunities and their management is integrated into this plan. The goal of recreation is to is to realize satisfying experiences by participating in preferred activities in preferred environmental settings, and a service delivery system which provides suitable, compatible recreation opportunities.

Letter 26, page 1

TUCSON CONSERVATION CENTER 1510 East Ft. Lowell Tucson, Arizona 85719 (520) 622-3861 Fax (520) 620-1799



PHOENIX CONSERVATION CENTER 333 East Virginia Avenue, Suite 216 Phoenix, Arizona 85004 (602) 712-0048 Fax (602) 712-0059

Ms. Karen Simms, Community Planner Bureau of Land Management, Tucson Field Office 12661 E. Broadway, Tucson, AZ 85748

RE: Draft Las Cienegas Resource Management Plan

November 27, 2001

NOV 2 9 2001

TUCSON FIELD OFFICE

Dear Ms. Simms:

Enclosed you will find comments from The Nature Conservancy of Arizona regarding the draft Las Cienegas Resource Management Plan. These comments are specific to upland resource management and fire management.

Overall, the intent of our comments are to encourage development of a plan that incorporates the use of fire as an upland vegetation management tool to the maximum degree possible and that is appropriate given ecological and administrative concerns. We are suggesting some modifications that will reflect the current federal emphasis on crossjurisdictional fire planning and implementation, and provide a basis for expansion of the fire management goals beyond what is currently specified as opportunities develop in the future.

Thank you for providing us the opportunity to comment. Please feel free to contact me at 520-622-3861 extension 3468 should you have any questions regarding these comments.

Sincerely

Ed Brunson/

Fire Manager, The Nature Conservancy of Arizona

Enc.

Electronic cc: A. Laurenzi, TNC

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Letter 26, page 2

Draft Las Cienegas Resource Management Plan and Environmental Impact Statement

Comments submitted by The Nature Conservancy of Arizona

Submitted to the Bureau of Land Management, Tucson Field Office, 12661 East Broadway, Tucson Arizona, 85748

The comments included in this document are limited to the issues of upland resource management and fire management.

The Las Cienegas Resource Management Plan planning area includes land administered by the Bureau of Land Management, the Arizona State Land Department and private property. It also is bounded on multiple sides by property administered by the United Stated Forest Service. While there are no large communities in the planning area, there are multiple residences that create a Wildland Urban Interface (WUI) situation. This condition is expected to multiply in magnitude as future residential development occurs, and the draft plan indicates that these conditions are a significant limiting factor to the utilization of fire as a vegetation management tool.

The preferred alternative (#2) currently calls for vegetation treatments, including prescribed fire, on 20,000 acres or 14% of the planning area. Regarding planning for prescribed fire, on page 4-8 it is stated that:

"Under alternative 2 BLM would implement an integrated vegetation management treatment strategy to include all the public lands in the planning area. This strategy would also encourage collaboration by adjacent landowners in designing treatments that include suitable State Trust and private lands to create the most logical and economical units possible."

While the current and expected future WUI conditions in the planning area will have limiting effects on the use of fire, it may still be possible through broadly cooperative planning to utilize fire on a larger scale than the 20,000 acres currently identified. Current federal directives encourage the Departments of Interior and Agriculture agencies to work across boundaries in the planning and management of fire and to work with state. local and private interests. This plan can be strengthened by strongly calling for coordinated fire planning between the BLM, Arizona State Land Department and the US Forest Service. Even thought there is no Forest Service land within the planning area, there is a definite practical advantage to cooperative planning for prescribed fire in the non WUI areas on the eastern side of the planning area adjacent to the Whetstone Mountains. A statement advocating for coordinated planning also reflects the fact that this should be done concurrently with the USFS Coronado National Forest Plan update that is due to start in the near future. We would encourage the BLM and entire planning team to consider 20,000 acres as a minimum target and indicate in the plan that the administrative support exists for a significantly larger area to be addressed through collaborative processes. This approach will reflect current agency positions on cross-

26- 1

26-2

- 26-1. Your comment has been noted. Coordinated fire planning does occur in many areas between the BLM, Arizona State Land Department, and the U.S. Forest Service and would occur for prescribed fires on Las Cienegas.
- 26- 2. Your comment has been noted. In the description of vegetation treatments, the text states that additional acres could be considered for treatment based on monitoring, thus more than the proposed initial 20,000 acres could ultimately be treated by prescribed fire.

Letter 26, page 3

26-3

26-4

26-5

jurisdictional fire planning and provide a documented basis for pursuing collaborative projects.

We wish to suggest the following modifications to the draft plan.

 Page 2-82. Management Actions Common to Alternatives 2,3 and 4. Watershed: Upland, Riparian and Aquatic Area Management Actions.

Insert language that applies to all alternatives. This language states that in non-Wildland Urban Urban Interface areas the BLM will implement an integrated vegetation management strategy. This strategy will include the cooperative planning and implementation of prescribed fire on land within and adjacent to the planning area when it is practical from ecological and administrative standpoints. This collaborative prescribed fire strategy should be developed consistent with the upcoming planning process for the Coronado National Forest.

Table 2-4, Page 2-16. Wildland Fire Management

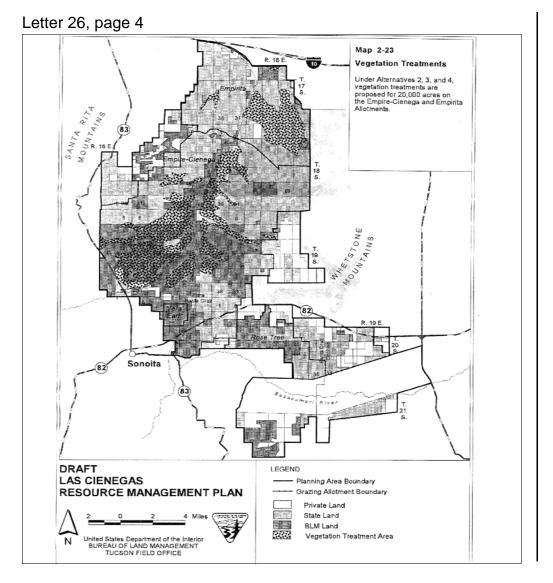
Under Alternative 2, 3 and 4, insert language that reflects the importance of fire as a management tool and the use of a coordinated management approach. For instance: Unplanned wildland fires in the WUI will be suppressed, a multi-agency management strategy that incorporates ecological and administrative issues will be developed for fires outside the WUI.

Map 2-23, Vegetation Treatments.

Modify this map to show an enlarged potential prescribed fire treatment area to include additional portions of the eastern portion of the planning area. (see attached map)

- 26-3. Your proposed language has been inserted in the document as a watershed action in the management actions common to Alternatives 2, 3, and 4 section.
- 26- 4. See new language inserted in the document in Table 2-4, wildland fire management and in the wildland fire section of each alternative land use plan.
- 26-5. Text has been added to Map 2-23 to clarify that an enlarged potential vegetation treatment area (including prescribed fire) can occur based on coordination with surrounding land managers.

Chapter 6: Public Comments and Responses



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Page 6-131

Letter 27, page 1



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION IX 75 Hawthorne Street San Francisco, CA 94105

RECEIVED DEC - 3 200

November 23, 2001

Shela McFarlin, Field Manager Bureau of Land Management Tucson Field Office 12661 East Broadway Tucson, AZ 85748-7208

Dear Ms. McFarlin:

The U.S. Environmental Protection Agency (EPA) has reviewed the Las Cienegas Resource Management Plan Draft Environmental Impact Statement (DEIS) [CEQ #01012], Pima and Santa Cruz counties, Arizona. Our review and comments are provided pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA Implementation Regulations at 40 CFR 1500-1508, and EPA's authorities under Section 309 of the Clean Air Act.

The Las Cienegas National Conservation Area (NCA) was designated by Congress in 2000 in order to conserve, protect, and enhance the unique and nationally important aquatic, wildlife, vegetative, archaeological, paleontological, scientific, cave, cultural, historical, recreational, educational, scenic, rangeland and riparian resources and values of the public lands there. The Act establishing the Las Cienegas NCA directs the Secretary of Interior to, among other things, permit grazing, restrict the use of motorized vehicles, and withdraw the NCA from mineral entry (except where valid rights exist) under the mining laws.

The DEIS evaluates alternatives for managing the Las Cienegas NCA and Sonoita Valley Acquisition Planning District. In addition to "no action," the DEIS analyzes three action alternatives covering a range of management strategies. Alternative 2, a consensus alternative developed by the Sonoita Valley Planning Partnership, has been designated as the preferred alternative at page 2-26. The proposed management plan for the Las Cienegas NCA envisions a flexible process, especially with respect to rangeland management. Management will be based on adaptive management strategies that will be implemented by the BLM with input from other land and resource managers, resource users, and other stakeholders.

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Letter 27, page 2

EPA has assigned a rating of **LO** – **Lack of Objections** to this DEIS (see enclosed "Summary of Rating Definitions and Follow-Up Action"). We commend the BLM and its planning partners for developing the preferred alternative in a collaborative fashion using an ecosystem approach. We appreciate the opportunity to review this DEIS. Please send a copy of the Final Environmental Impact Statement to this office when it is officially filed with our Washington, D.C., office. If you have any questions, please call me at (415) 972-3854, or call Jeanne Geselbracht at (415) 972-3853.

Sincerely,

Leonidas U. Payni

Lisa B. Hanf, Manager Federal Activities Office

003747

Enclosure: Ratings Summary

27-1. Thank you for your comment and rating.

SUMMARY OF EPA RATING DEFINITIONS

This rating system was developed as a means to summarize EPA's level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the EIS.

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

"EC" (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

"EO" (Environmental Objections)

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

ADEQUACY OF THE IMPACT STATEMENT

Category I" (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

"Category 2" (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analysed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

"Category 3" (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analysed in the draft EIS, which should be analysed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640, "Policy and Procedures for the Review of Federal Actions Impacting the Environment."

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Jane Dee Hull Governor

Michael E. Anable State Land Commissioner

Arizona State Land Department



1616 West Adams Street Phoenix, AZ 85007 www.land.state.az.us

February 20, 2002

Carl Rountree, Associate Arizona State Director United States Department of the Interior Bureau of Land Management Arizona State Office 222 North Central Avenue Phoenix, Arizona \$5004-2203

RE: Draft Las Cienegas Resource Management Plan

Dear Mr. Rountree:

In a recent conversation, you invited the Arizona State Land Department (ASLD) to provide the Bureau of Land Management (BLM) with written comments on the August 2001 draft of Las Cienegas Resource Management Plan and Environmental Impact Statement. In response, please consider the following observations, comments and suggestions.

Appendix 1 is the Congressional Act which established the Las Cienegas National Conservation Area (NCA) in January 2000. Section 4 of the Act (page A1-3) established the NCA as consisting of 42,000 acres of federal land, while Section 2 (page A1-2) created the Sonoita Valley Acquisition and Planning District (APD). The APD includes the NCA along with some 100,800 acres of predominately State Trust land. As stated in Section 3, the Secretary of the Interior is negotiate with land owners to acquire lands in the APD for future expansion of the NCA. Of particular relevance to the draft Plan, Section 6 (page A1-4) requires the BLM, within two years of the enactment of the legislation, to develop and implement a comprehensive plan for the long-term management of federal lands within the NCA.

Despite the fact that Section 6 gives BLM no authority or responsibility to develop a plan for managing lands in the APD lying outside of the NCA, and despite the statement on page 2-13 that "The proposals under each of the alternatives in this plan are intended to apply only to BLM-managed public lands," it is clear from the numerous maps throughout the draft Plan that BLM has spent considerable effort to plan future uses of State Trust lands outside the NCA, and that the various management alternatives imply or prescribe management of State Trust land. For example:

28-1

28- 1. There are many factors which are considered in determining planning area boundaries including jurisdictional boundaries, distribution of resources and uses across the landscape, and management efficiency. Traditionally RMPs prepared by BLM have covered large geographic areas encompassing several million acres of public lands. In these efforts, there have almost always been intermixed State and/or private lands within the planning boundary. The Las Cienegas RMP, similar to the RMPs being prepared for other NLCS units, covers a smaller geographic area. However, the planning area still includes intermixed State and private lands. The Las Cienegas RMP prescribes management for public lands within the NCA and the Sonoita Valley Acquisition Planning District. This approach ensures both that NCA values and resources are protected, conserved, and enhanced as required by the Act and that values and resources are similarly protected on public lands within the Acquisition Planning District which may be added to the NCA in the future.

Letter 28, page 2

Carl Rountree February 20, 2002 Page 2

28-2

• The draft Plan proposes various alternatives for managing the use of existing roads and trails, not only within the NCA, but throughout the much larger area of adjoining State Trust land. Under these proposals, different segments of existing routes would be conditionally open or closed for various uses. Although the text (page 2-13) recognizes that implementation of these linear management alternatives would require rights-of-way across state land, the maps which illustrate the proposals convey the impression that BLM's management plan would govern the use and non-use of routes across State Trust land. As long as the land is State Trust land, however, those portrayals conflict with the state's underlying authority to control access for recreational, hunting, and other uses.

28- 3

• With regard to Areas of Critical Environmental Concern (ACEC), the text of Alternative 2 (page 2-43) indicates that any State Trust land acquired in the future would be incorporated into the ACEC (emphasis added). The corresponding map (Map 2-10), however, shows the proposed ACE boundary as coinciding with the exterior boundary of the entire planning area, thereby including all State Trust land in the ACEC. Similarly, Alternative 3 states that 441 acres of public [BLM] land would be designated as the Nogales Springs ACEC (page 2-53), but the corresponding map (Map 2-16) shows the ACEC as also including some five sections of State Trust land.

28-4

 With regard to mineral uses, Alternative 3 (page 2-47) provides that BLM would not allow surface occupancy or mineral material sales in any ACEC, which as shown in Map 2-11, would include the five sections of State Trust land in the Nogales Springs ACEC.

28-

By planning for the future management of State Trust lands outside of the NCA, BLM has exceeded its authority as provided by the legislation which established the NCA. Therefore, ASLD asks that draft Plan be revised to narrow its scope to cover only the NCA. The Plan should also be revised to include a section devoted to a realistic consideration of the means by which BLM intends to compensate the beneficiaries of Arizona's State Land Trust for the Trust lands that are currently within the NCA and for the acquisition of State Trust lands in the APD for future expansion of the NCA.

28-6

Please call me at 542-4621 if you would like to discuss the revisions which ASLD is suggesting.

Sincerely,

Michael ?

State Land Commissioner

- 28- 2. The maps which illustrate proposals have been modified to clarify that BLM will not manage State trust lands.
- 28- 3. The map has been modified to exclude State Trust Land.
- 28- 4. The map has been modified to exclude 5 sections of State Trust land.
- 28-5. Chapters 1 and 2 will highlight text emphasizing that the management proposals are for BLM-managed public land only. ACEC and minerals maps have been corrected where some shading was inadvertently done on State Land. All maps have been reviewed and text added or changed, if necessary, emphasizing that management proposals are for BLM-managed lands only and will only apply to intermixed State Trust Lands if they are acquired.
- 28- 6. An acquisition strategy has been incorporated into the proposed Las Cienegas RMP. The strategy includes objectives of acquisition, criteria for identifying and prioritizing parcels, and identification of methods available for acquisitions.